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ABSTRACT

The Committee for general and technical education of the Council of Europe has initiated several projects to study, compare, and evaluate curriculum materials used in the member nations. The present study in economics attempts to summarize the status of various facets of economics teaching in Western Europe in the early 1970's. It was compiled from a wide range of information sources, including syllabuses of member countries' programs, a series of questionnaires, meetings of economics experts, personal interviews with teachers and administrators, and the study of background literature. The chapter topics include the role of economics in education; the aims of teaching economics; the structure of the syllabus; economics within an educational strategy; secondary termination and university entrance; methods of teaching economics; training teachers; assessing the candidates; and a challenging future for economics. Related documents are ED 070 652 and SO 006 729. (Author/KSM)

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COUNCIL
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EUROPEAN CURRICULUM STUDIES

Nº 7 : ECONOMICS

1972

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EUROPEAN CURRICULUM STUDIES

(in the Academic Secondary School)

N° 7 - ECONOMICS

by

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Council for Cultural Co-operation
Council of Europe
Strasbourg
1972

$4.00

The Council for Cultural Co-operation was set up by the Committee of Ministers of the Council of Europe on 1 January 1962 to draw up proposals for the cultural policy of the Council of Europe, to co-ordinate and give effect to the overall cultural programme of the organisation and to allocate the resources of the Cultural Fund. It is assisted by three permanent committees of senior officials : for higher education and research, for general and technical education and for out-of-school education. All the member governments of the Council of Europe, together with Greece, Finland, Spain and the Holy See are represented on these bodies[1].

In educational matters, the aim of the Council for Cultural Co-operation (C.C.C.) is to help to create conditions in which the right educational opportunities are available to young Europeans whatever their background or level of academic accomplishment, and to facilitate their adjustment to changing political and social conditions. This entails in particular a greater rationalisation of the complex educational process. Attention is paid to all influences bearing on the acquisition of knowledge, from home television to advanced research ; from the organisation of youth centres to the improvement of teacher training. The countries concerned will thereby be able to benefit from the experience of their neighbours in the planning and reform of structures, curricula and methods in all branches of education.

Since 1963 the C.C.C. has been publishing, in English and French, a series of works of general interest entitled "Education in Europe", which records the results of expert studies and intergovernmental investigations conducted within the framework of its programme. A list of these publications will be found at the end of the volume.

Some of the volumes in this series have been published in French by Armand Colin of Paris and in English by Harraps of London.

These works are being supplemented by a series of "companion volumes" of a more specialised nature to which the present study belongs.

General Editor :

The Director of Education and of Cultural and Scientific Affairs, Council of Europe, Strasbourg (France)

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A B B R E V I A T I O N S

The following abbreviations have been used throughout the text.

A	Austria
B	Belgium
CH	Switzerland
CY	Cyprus
D	Federal Republic of Germany
DK	Denmark
E	Spain
EIR	Ireland
F	France
GB	England and Wales
I	Italy
L	Luxembourg
M	Malta
N	Norway
NL	Netherlands
S	Sweden
SL	Scotland
TR	Turkey

PREFACE

Over the past decade the Council of Europe has increasingly interested itself in the process of curricular reform. Thus, in 1965 it commissioned the ... University Department of Educational Studies to undertake a series of comparative studies to investigate the possibility of achieving greater harmonization in the curricula and examinations at the upper academic secondary level of education in member States of the Council. This level was chosen because of its key importance in access to higher education, and also because of its rapid evolution.

The OCESCE Project (an acronym for : Oxford/Council of Europe Study for the Evaluation of the Curricula and Examinations), as it came to be known, has consequently undertaken a systematic study of the various disciplines commonly studied at this top level of secondary education. Reports have already been published on mathematics, Latin, chemistry, physics, biology, and modern languages. A report on the teaching of the mother tongue is in the press, and reports on civic and social education, and on history and geography are in preparation. This will complete the series of eleven subject reports. A final report will then attempt to synthesize the findings to date, to distinguish patterns of curricular organisation characteristic of this level of education, to point to future trends, and to sum up the degree of equivalence possible among the twenty-one member States of the Council for Cultural Co-operation.

The importance of the equivalences problem needs no emphasis in this age of increasing mobility of students within Europe, when professional and skilled workers, international civil servants, diplomats, businessmen and industrialists are often called upon to move frequently with their families from one country to another. If this has been an immediate imperative for the OCESCE Study there have been other no less urgent reasons for undertaking it. It has been argued with some cogency that the industrial societies of Western Europe are becoming increasingly technocratic, and that consequently there must be some "convergency" of their educational systems. It has also been argued that, although political agreements on equivalences are ultimately essential, in order to prevent wastage, pedagogical equivalence (or at least "acceptability") is also vital : the student from the foreign country coming from a different system must have undergone a preparation for higher education which is similar, if not identical, with that of the country in which he intends to study. The degree of "fit" or congruence is therefore a valid criterion for his admission. The higher this level of congruence the less likelihood there will be that he will fail in higher education. This matching process should not only apply to curricula objectives, but also to content, methods and evaluation. An example may make this plain : if a foreigner wishing to study mathematics at a foreign university is placed in a first-year course in which an elementary knowledge of calculus is assumed, (because the indigenous students will have studied calculus already at the upper secondary level) the foreign student must have this same background in calculus in order not to be disadvantaged from the outset. Thus, whilst ultimately equivalence decisions are a matter for the policy-makers, the knowledge which will enable them to make informed judgements must come from comparative studies of curricula and examinations.

The present study on economics attempts to provide this background, but also goes a great deal further. It is in fact a summary of the status of various facets of economics teaching in Western Europe in the early 1970s. It has been compiled from a wide range of sources of information : syllabuses, programmes, directives and instructions supplied by member countries ; a series of questionnaires ; a meeting of delegates of member States, experts in economics, held at Strasbourg ; a series of personal interviews with university and school teachers, administrators and officials of the various ministries ; and the study of background literature in a number of languages. In the collection and analysis of this data the main task has fallen upon Mrs. Julia Marshall, until recently a Research Officer in the Department, who performed her task with great diligence and competence.

As Director of the OCESCE Study, I should like to thank very warmly, Dr. Rust for devoting part of his sabbatical leave to write what is a very complex and exacting reprt with such clarity and precision. I should also like to express our gratitude to the Council of Europe, and in particular to Mr. G. Bemtgen, Head of the Division for General and Technical Education, for making this study possible. I should add that the views expressed in the report represent only those of the writer and his associates in the OCESCE Study, and are not, of course, necessarily of the Council of Europe or its officials.

W.D. HALLS

Department of Educational Studies,
Oxford University,
October 1971.

C H A P T E R I

THE ROLE OF ECONOMICS IN EDUCATION

The head of every household is an economist. He (or sometimes she) receives income and manages expenditure. He and she (where there are marital partners) manage savings for holidays ; for new furniture ; or a car ; or a house. When the savings are required for an expenditure item as durable as a house, then capital investment must also be undertaken.

The household income derives from an expenditure flow from the employer. It is the economy of the firm, or the industry, or the public employer which provides the production capable of producing outputs sufficiently large to provide income input to the employee.

The micro-economy of the household or the firm forms part of the macro-economy of the state. The state, in turn, demands income from its members, so that the state can provide expenditure for keeping order, for defence, for material services and for social services - such as education.

Almost every member of every organised community becomes an economist because of the necessity to make rational choices between alternative ways of using income. Income is scarce, therefore it must be distributed according to priorities which the individual or the firm or the state decides upon. Even quite small children must spend their scarce pocket money on individually determined scales of priority ; perhaps between kinds of sweets, or between some sweets and some saving, or between no sweets and all saving. That is the economic problem, and no-one is exempt from it.

Size of the economic unit

Many of the economic decisions required of the individual or the firm or the state were relatively easy to determine when the economic unit was small. Commonsense, allied to the application of varying levels of experience and intelligence, could balance income against expenditure. A small surplus of income over expenditure meant success. A small excess of expenditure over income implied failure.

Those unsophisticated days of economic organisation have disappeared because the size of the economic unit (apart from the household) has grown enormously. This growth in the size of the economic unit has been accompanied by a lengthening of the time required to produce outputs. The lengthening time to produce outputs has required capital investment ; and capital investment depends on borrowing.

Although the household may not have grown in size as an economic unit, most households have, like industry, commerce and the state, become more and more involved in borrowing.

Now, almost every household must not only manage income and expenditure, it must relate these quantities to the repayment of hire-purchase, to the cost of insurance, to the rate of interest on a mortgage, and perhaps to the difference between a repayment of house purchase over twenty or thirty years. Every household is dependent upon the economy of the firm or a public agency or the state for its income.

The firm borrows extensively for its productive processes, but its borrowing powers, and the rate of interest it must pay, depend upon the economic and financial conditions controlled by the state. Even the largest productive enterprises are incapable of financing all capital investment from

their own resources, i.e. from past profits.

The state itself borrows extensively, in addition to demanding tax payments from its citizens. The state, like the household and the firm, no longer supervises a simple income and expenditure economy. The state has learned through Keynesian economics that there must be periods of time when the state deliberately spends more than it receives. There must also be times when economic policy must decide that the state will receive more than it spends over a given period of time.

Maintaining full employment

These complexities have not come upon us merely to make the life of economists and citizens more difficult. They derive from the overwhelming social, political and economic necessity for the state to maintain a high level of employment. Employment depends upon the total flow of money in a community, for total flow of money provides effective demand for goods and services. Effective demand for goods and services provides income to the firm. Income to the firm provides the means to expenditure on employees. Expenditure on employees provides income to the household.

Apart from the wholly planned economies such as U.S.S.R., this economic strategy of a lengthening period of production, whithin a framework of a state controlled full employment policy, is little more than twenty-five years old. The full implications of this economic strategy have yet to be worked out, for we have not yet learned how to provide full employment in a free society without the insidious threat of inflation. Inflation can undermine the household economy just as it can bankrupt the firm, and bring catastrophe to the economic policies of the state.

It is little wonder then, that the study of economics has assumed much greater importance in virtually every country of the world since the economic reconstruction which followed the ending on the second world war. The study of economics cannot be confined to professional economists, trained by the universities to advise the state or the large organisations of employers or employees. The plain fact is that every citizen is an economist. The citizen can only provide a rational framework for his own economic decisions if he understands the causes and consequences of the macro-economic situation provided for him by the state.

Europe as an economic unit

The size of the economic unit has, in many cases, grown beyond the individual state. Vast productive enterprises spread over many countries. Raw materials from one country are processed in a second country, transported in the ships of a third country, to be assembled in a fourth country, to be sold perhaps in fifty countries.

Europe found itself poor after the second world war. Despite its geographical homogeneity, it was socially, politically, linguistically and economically heterogeneous. Ten competing countries in Western Europe offering mass production of many products could never prove to be a match for the single economic unit of the United States of America. The growing economic power of the Soviet Union to the east frightened the economists of Europe as much as it did the politicians. It was fear of economic vassalage which brought the countries of Western Europe closer together.

Economic importance of exports

Fear of economic dependence was not the only source of danger for the countries of Western Europe. As each country began to be forced by economic logic to specialise more and more, so each country found itself more and more dependent upon imports. Theses imports might be raw materials

as inputs to a productive process ; or they might be food to supply a population both growing in size and deserting agricultural production for urban factory life.

How could these imports be paid for ? It is an economic truism that imports are bought by exports. Here we have a variable factor in economic strategy which grows in importance as countries specialise.

The sale of exports may go up and down in accordance with price, and the professional economist will hurry to add that these sales depend upon the elasticity of demand for the exports, i.e. how much does demand change in relation to changes in price. But let us exclude elasticities for the moment.

If the prices of our exports rise too high, we shall be unable to sell them abroad. If we cannot buy imports, i.e. we shall have to do without imported food or raw materials. This is an oversimplified picture, but it still gives us some appreciation of the economic importance of exports. It also enables us to estimate the relevance to any given economy of its export industries, and especially the critical importance of the price of exported goods.

Economic role of the trade unions

The prices of exported goods depend a good deal on the cost of making those goods. The cost of making many goods depends heavily on the cost of labour employed in making them.

The cost of labour is determined by the interaction of bargaining between employers and employees. The employers are sometimes represented by employers'associations, while the employees are usually represented by trade unions. In a free society, the trade unions are enabled to bargain freely, and to use, as their major bargaining weapon the power to strike, i.e. to withhold their labour.

The most serious economic problems of Europe during the twenty-five years from 1945 stem from these powers of the trade unions. The ability to bargain freely in a competitive situation for rises in wages can, in a situation of "full employment" cause inflation. The power to withhold labour may reduce production or even enable oversea rivals to take away markets, i.e. to eliminate firms or industries in the home country.

It is not contended here that these powers should be withdrawn from trade unions. On the contrary, well-organised, responsibly managed, freely bargaining trade unions are a necessary condition of a free society. It is contended, however, that trade unions can only bargain responsibly if their members are fully aware of the economic facts of life. These economic facts of life must include a concern for full employment, a recognition of the need to maximise exports, an understanding of the dangers of losing markets to overseas competitors, and the over-riding importance of controlling inflation. None of us is born with these facts of economic life in mind. We must learn them by a study of economics within the framework of our own country's economic situation. Europe and all its member countries needs sensitising to the necessity for all its citizens to know some economics.

Formation of the Council of Europe

The Council of Europe was formed in May 1949. Article 1 of its Statutes sets out the aims of the Council as the achievement of "a greater unity between its members for the purpose of safeguarding and realising the ideals and principles which are their common heritage and facilitating their economic and social progress". Despite the idealistic setting in which these aims are placed, the

realities are expressed in the two keywords "safeguarding" and "economic". i.e. the aims are primarily defence of the European community against political or economic aggression.

The Council of Europe as such has, rather surprisingly, achieved most of its success in areas of specialist , or cultural co-operation. So far, it has achieved little success in the development of mutual economic policies for its member states. This relative failure for the Council as a whole arose because of the success achieved by two groups of its members in the formation of economic associations. These associations became, in time, the European Economic Community, and the European Free Trade Association.

The European Economic Community

In May 1950 Robert Schuman suggested that French and German production of coal and steel should be placed under a common authority within the framework of an organisation open to the other countries of Europe. Within a year the European Coal and Steel community was born. It had six parents. They were France, the Federal Republic of Germany, Belgium, Italy, Luxembourg and the Netherlands. The European Coal and Steel Community was given powers to manage, on a community basis, the coal and steel resources of the six member countries. A common Assembly, with representatives from the six governments was formed to provide a framework of public control over the European Coal and Steel Community.

Two further economic institutions for the six countries involved were formed by the Treaties of Rome signed in 1957. These institutions were

1. The European Atomic Energy Community (Euratom) and
2. The European Economic Community (the Common Market or E.E.C.)

Euratom was set up to accelerate and co-ordinate the growth of nuclear energy based industries within the six countries. The aim was to make the six countries self-sufficient in their provision of energy supplies, thus relieving a dangerous dependence upon overseas power supplies mainly deriving from the need to import oil.

The European Economic Community was designed to harmonise the economic policies of the six countries. To this end, E.E.C. has aimed at the formation of a customs union which finally came into operation on 1 July 1968. The customs union is intended to abolish customs duties within the six member countries, and to achieve the formation of a common external tariff against imports from all other countries of the world. Common policies are envisaged for agriculture, regularisation of competition, methods of transport and foreign trade. Similarity of policies between the six countries is developing in methods of imposing indirect taxation (via a value added tax); in research and technology, in energy supplies, in social welfare payments, and in monetary policy. A major effort is under way to create a common currency for the six countries by the late 1970s.

In July 1967 the three major institutions of the six countries, i.e. the European Coal and Steel Community, the European Atomic Energy Community and the European Economic Community, were united under a single managing body "The Commission". The Commission is supervised by a single Council. Political control is maintained through the European Parliament. All the aspects of the Commission's work are served by the European Court of Justice.

The non-participants

If only all the members of the Council of Europe had joined the economic and political

institutions set up by the six countries which formed the European Coal and Steel Community, Europe would, by now, be well on the way towards a solution of its economic problems. But economic history is full of sentences beginning "if only", and most of those sentences end with a picture of fragmented economic groups struggling to compete with larger and more integrated economic units.

The United Kingdom hesitated on the brink of joining the European Coal and Steel Community. Insular politics prevailed over economic foresight, and the United Kingdom stayed out. As a result, many other members of the Council of Europe also decided not to join in ECSC.

Seven of the countries subsequently formed the European Free Trade Association (EFTA). The seven countries were the United Kingdom, Austria, Denmark, Norway, Sweden , Portugal and Switzerland. The aim of EFTA was to attain a customs union, like EEC, and to maximise trade between the member countries. EFTA has achieved limited success.

" During 1972 the United Kingdom, Eire and Denmark decided to join the European Economic Community ".

Educational Activities of the Council of Europe

Fortunately, the Council of Europe did not allow the economic pacemakers of the six member countries of ECSC to prevent the progressive development of European studies. The Council of Europe has turned its attention to social questions, such as the difficulties of migrant workers ; to public health matters such as the control of drugs ; to legal questions such as the age of legal capacity ; to human rights ; and perhaps most important, to matters concerning education and culture.

With the possible exception of cultural conventions, all the topics studied by the Council of Europe have economic implications. Education, in particular has a far-reaching impact on the minds of the young and their attitudes towards society, towards politics and towards their personal status as job-seekers and members of an economic community.

The Council of Europe has set up a separate division, the Division for General and Technical Education with the aim of discovering the educational requirements of Europe over the next two decades. These educational requirements must be derived from the best current practice, and projected forward in time. The educational aims must be set in a context of rapid technological change, in a climate of sociological evolution, and in pursuit of an economic strategy which must provide a rising standard of living combined so far as possible with economic security. The philosophy of the times also demands that the economically disadvantaged, the old, the sick, the non-employed, must be cared for, and that a rising proportion of each national income must be devoted to the provision of more and better education.

How are these, sometimes contradictory, aims to be achieved ? The Council of Europe has a strategy which aims :

1. to examine existing conditions in education in order to discover which elements could be applied or adapted elsewhere ;
2. to undertake comparative research into different approaches to common educational problems within member countries ;
3. to compare and contrast these various solutions ;

4. to make recommendations to governments based on these findings.

This practical and commonsense research programme may take considerable time to achieve results. But international associations do not grow into unitary countries overnight. It is even questionable whether culturally, or linguistically the countries of Europe should grow into a unitary community. The need is not for cultural conformity, but for economic co-operation. Cultural variety can best be achieved through higher standards of living in all the countries concerned. The higher standard of living can only arise through economic co-operation.

It is heartening then to find that the Council of Europe's Committee for General and Technical Education states the following aims in relation to education :

1. to aid governments towards harmonisation (which is not synonymous with unification) ;
2. to promote a greater European consciousness among teachers and pupils ;
3. to achieve practical collaboration between governments.

It is within this framework of philosophy that the Council joined with the Oxford University Department of Educational Studies to form a joint project for the evaluation of curricula and examinations. Initially the joint project aimed at discovering the minimum level of knowledge necessary for entrance to European universities. This aim involved

a) an analysis of curricula and examinations ;
b) the determination of common subjects for a possible European examination, and
c) the establishment of a prototype experimental European examination which might, in time achieve the common requirements for university entrance in Europe.

Studies of curricula and examinations at the upper secondary level have been completed in the subjects of mathematics, Latin, English as a foreign language , chemistry, physics and biology. Research is continuing in the areas of French and German as foreign languages, civics, and the mother tongue. The present work brings us back full circle to the over-riding importance of the study and teaching of economics.

Oxford/Council of Europe study for the Evaluation of Curricula and Examinations. Working party on economics, April 1970

The immediate source of much of the material for this study was the joint working party on economics organised by the Oxford/ Coucil of Europe group for the evaluation of curricula and examinations.

The Director of the Joint Project, Dr Halls of the Oxford University Department of Education, invited the Working Party to consider a range of topics which were felt to be essential in any discussion on the re-development of teaching and learning economics in a European context. The topics were :

1. To what extent are current curricula designed to deal with modern macro-economics ?
2. How far have economic studies moved away from theoretical considerations of the concept of perfect competition ?
3. Are the syllabuses designed to give pupils an understanding of the major economic systems now operating in the world e. g. capitalist, socialist, or mixed economies ?

4. To what extent are teaching programmes related to real life situations e. g. how far do they cover business administration or office organisation ?

5. What is the relationship between the teaching of economics and other social sciences ?

6. What new developments are occuring in the methods of teaching economics ?

7. Is economics a subject proper to secondary education at all ?

These are large questions which can be expected to draw very different responses from the representatives of the different European countries attending the Working Party. Each group was asked to consider the seven topics in the light of short term objectives and long term aims.

The short term objectives required discussion centering round a classification (or taxonomy) of educational objectives to be sought in the teaching of economics. The research group from Oxford University had prepared a taxonomy of educational objectives derived from those set out by B. S. Bloom. These objectives included the inculcation into the pupils of the following educational abilities in terms of economics :

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

Each aspect of this classification of educational objectives is clearly open to question, and to modification in relation to any particular subject. We shall see in Chapter II how far the various country representatives found it possible to apply these proposed educational objectives to the teaching and study of economics.

The long term aims of teaching any subject may be regarded as the general aims of education. These might include the development of general qualities of character and intellect appropriate in the case of this study to the upper secondary level in education. The long term aims might also include preparation for a subsequent stage of education, or for employment, or, more generally for leisure. How far can we seek, and find these long term aims expressed in the teaching of economics ? Is it, in other words, possible to regard economics as a profoundly educative subject of study comparable in importance to the study of (say) history, or geography, or a modern foreign language ?

The status of economics in education

At the university level the study of economics has, since the second world war attained a status equal to any other form of study. At the secondary level of education, economics is only now beginning to achieve parity of status with such subjects as history or geography.

In some countries of Western Europe the subject entered the secondary school system between the two World Wars as a vocationally directed complement to commercial studies such as shorthand and typewritting or book-keeping. This elementary level of economics was firmly based upon factual knowledge about the activities of commerce.

Vocational education was and is still held in lower esteem than academic education throughout Europe. In the Federal Republic of Germany for example this division between general (academic) and vocational education still exists. There are educationists in that country who still dispute the

inclusion of economics in general education. These educationists regard economics as purely functional and a form of vocational training.

A similar situation was true of the United Kingdom and of France even until the last five years. During these five years, there has been a substantial expansion of the study of economics as an academic discipline at the upper secondary level. In the United Kingdom the number of entries in economics for the General Certificate of Education at Advanced level (university entrance qualification) quadrupled over the five years 1965 to 1969. In France a nearly comparable level of expansion has taken place in candidates taking economics as a subject in the Baccalauréat examination, and there has been a much greater expansion of the study of economics over the final three years of secondary education. This aspect of economic study is aptly described as the "initiation économique et sociale".

It will be obvious that the introduction of a relatively "new" subject to the school situation must arouse opposition. School study time is limited. Teacher supply is limited. If a new subject is introduced to a school, then some other subject must be excluded or diminished in importance. If a new teacher is to be employed for this new specialism, then existing teachers may well fear a threat to their jobs.

Despite this difficulty of social engineering, economics has found a place in the school systems of almost all the countries of Western Europe. The demand for the subject by pupils is increasing. The supply of properly qualified teachers of economics is expanding to meet the new demand.

Commerce and economics

These practical matters are pre-requisites to the attainment of parity of status for economic studies within the secondary school system.

An equally important pre-requisite in the case of economics, is however, to distinguish sharply between the learning of commercial facts and the study of the theory and application of economics. The study of commercial facts includes such items as the documents used in export practice, or the calculation of turnover rates for retail stores, or the commercial use of a bill of exchange. These topics are proper to the study of commerce as a complement to other commercial skills required of a clerk or a book-keeper, or a junior salesman. This study is rightly vocationally orientated.

The study of the theory and application of economics as an academic discipline covers far wider topics such as the balance of payments, national income and expenditure, budgetary policies, the control of inflation, the relationship between savings and investment and the strategy to maintain full employment.

Such topics have, until very recently, formed the basis of an economics course at a university. Evidently the topics must be simplified so as to be taught appropriately to secondary school children, but taught they are, and with some considerable success as is evidenced by the examination results of the major countries under review here.

Much of the argument about the vocational nature of past teaching of commerce is quite inappropriate when applied to economics as studied at the upper secondary level. The intellectual disciplines are very different. Factual recall and application would be typical educational skills required of the student of commerce. The student of economics, however, is required to be capable, through his study, of exhibiting also the more advanced educational skills of comprehension, analysis,

synthesis and evaluation. We shall seek to expand on the utilisation of these higher skills in chapter II.

Relevance of economics to a "liberal" education

Reference to the higher skills of education brings into prospect a consideration of whether economics can be accepted as a subject suited to form part of a broad liberal education. It is part of the tradition of education in Western Europe that its aims include the widening of mental horizons, the stretching of intellectual abilities and the inculcation of well-balanced and tolerant attitudes. How far can we regard economics as contributing suitably to these aspects of a liberal education ?

In terms of a study of micro-economics e. g. the functions of the firm, it is not easy to expect the inculcation of these desirable qualities of a well educated person. It is, however, part of the general tendency of economics to widen its study into the macro-economic scale. Here the economics teacher demands capacity to discern the widespread economic activities of the state, the interaction of exports and imports, the migration of labour or the inter-penetration of industries by capital. Even wider horizons are being opened, because macro-economics now leads towards the comparative study of economic systems. Theoretically perfect models of capitalist economies may be compared with theoretically perfect models of socialist economies. Applied economics demands a comparison of the realities of capitalistic or socialistic economies. European economic pratice within states varies so much that comparative study of these mixed economies can bring fruitful results to the embryo economist. Even the specialist economic problems of the underdeveloped territories must be carefully understood, if only to provide a rationale for the economic aid provided by many European countries to some underdeveloped countries.

A strategy of economics teaching based on the broad categories outlined above can scarcely fail to develop the qualities of mind required of a widely educated person.

Yet we must still be a little hesitant about this study of economics. Some of the areas of interest are so closely involved with political thinking that it is difficult at times to distinguish professional economic advice from politically committed opinion. No doubt we should find this situation even more true of the U. S. S.R. than we should of the countries of Western Europe.

The plain truth is that economic studies are to some extent a derivative of political philosophy. Yet so is history, and history is not regarded as academically second-rate. Historians have gained in stature as their studies extended beyond the confines of one state. A closer approximation to truth arose in history as comparative studies revealed that the history of other countries showed remarkable contrasts to the history taught in any one given state. As history has gained, so economics has learned. Comparative studies of economic systems are bound to widen minds, open eyes, and unstop ears closed to the values of any economic system different from that practised in a given country.

In this style, economics is a profoundly valuable educational study. The rise of international institutions during this century has been rapid. We may be far away from a world state, and still a little way from a co-operating group of European states, but the European institutions creep steadily forward year by year. These European institutions must be staffed by European or international civil servants with loyalties far wider than those customarily acquired by the citizen of any one state. Those international civil servants will be certain to find that, however much they need a knowledge of politics, a knowledge of economics will form a substratum for every consequential international or European decision they take.

The calibre of candidates

Training for international civil servants brings forward the necessity to discover whether economics, as a subject for study, attracts the best students. At the upper secondary school level there is a general acceptance among the European countries that pupils opting to study economics are rarely those most intellectually gifted. Those pupils who attain high achievement in scientific subjects early in a secondary school career go on to specialise in physics or chemistry or biology for their university entrance examination. Good mathematicians specialise in mathematics. Those outstanding in history or foreign languages generally choose to follow the specialism through to the end of a secondary school career. Where then does the embryo economist come from ? In the schools of the United Kingdom, the typical student of economics comes from the non-specialist or the all round averagely good candidate. If the pupil is not especially good at an arts or science subject, then he may be advised to take the economics option.

Special subject choice of this kind is not quite so easy in the French or Federal German systems of education, for both the Baccalauréat and the Abitur require a much wider range of subjects than does the United Kingdom General Certificate of Education at Advanced Level. Hence, it is possible to find rather more able candidates taking to economics in the French or Federal German terminal secondary examinations than in the United Kingdom.

It still remains true, however, that economics is a second choice subject and that generally speaking it attracts the average, rather than the specially gifted pupil. Fortunately, this situation is beginning to change as more secondary school pupils grasp the importance of economics both to their development as people, and to their future career prospects. It was perhaps a sign of changing times that at the 1970 Council of Europe meeting on economics, the Luxembourg delegate expressed the view that economics has a considerable contribution to make to the personal and cultural development of young people in that it provides incisive analytical concepts which can be used in the understanding of society and in the planning of a career and future development.

Economics as a subject does not suffer seriously through its association with the good average, rather than the brillant student. Medicine for many years carried the same reputation, yet medicine now commands respect which was once reserved to religion. Economics is a subject which must in time be made available to every pupil and every student. It is right therefore that its educational strategy should be directed towards the average rather than the specially gifted pupil.

Europe's need for economic expertise

The first industrial revolution began in the England of the eighteenth century. Belgium, Holland and France followed. Soon Europe became the leader in the world economy. The second industrial revolution, science, technology and computer-based, is now affecting the entire world and Europe is falling behind rapidly advancing economies like those or the United States of America or Canada, or Japan.

The new feature of this second industrial revolution is the close association between economic organisation and a rapidly developing technology. Research and innovation form the infrastructure of this advancing technology. New processes of production, new means of communication, new sources of power all contribute to the cutting of costs and thus to potential rises in standards of living.

Europe can only maintain its living standards if it keeps its share of world markets, if it encourages innovation, if it manages its economic resources better than its competitors. There is no better way of achieving these aims than in expanding Europe's economic expertise through the incorporation of economic studies into appropriate levels of its educational systems.

C H A P T E R I I

THE AIMS OF TEACHING ECONOMICS

The conclusion of our study of the role of economics in education led directly to the growing need to incorporate economics into the educational systems of the countries of Europe. Some consequences of that conclusion are already to be seen in the steadily rising number of children studying economics in the various countries of Europe. It would be no more than the extrapolation of an existing trend to expect this expansion of the study of economics at secondary level to expand substantially in the future.

From an expansion of economic studies based on European economic interests, it would follow logically that the aims of teaching economics within European countries should include that of teaching about Europe. In fact, there is extraordinarily little about Europe as an economic entity in any of the aims of teaching economics expressed overtly or covertly by the representatives of the various European countries who provided the research material for this study. During the course of this chapter we shall aim to comment upon and analyse some of the very detailed aims of teaching economics expressed from those countries.

Is economics of direct utility to the pupil ?

Educationists are very conscious of a distinction, too frequently drawn, between vocational education and general education. A supposed contrast is posed between "pure" general education which carries intrinsic merits because it has no vocational aim, and vocational education which is often assumed to be of lesser educational value.

This arid distinction is becoming less serious in its impact on education, because the past quarter century has seen a steady rise in the acceptance of vocational education as a purposeful part of all education.

Even at the primary school level it cannot be denied that learning to read and to write is partially aimed at the eventual use of these skills in earning a living. At the secondary school level, vocational education was specifically excluded in many European countries as recently as the years immediately following the second world war. But times change and education (although slowly) with them. There is a powerful motivating force towards learning if we can show the secondary school child that some parts at least of his education may enable him to obtain a suitable job. Proficiency in the use of numbers is a skill consciously or unconsciously aimed at subsequent use in employment. Simple skills in the use of wood, or metal, or plastics may not directly qualify for employment, but, at the minimum they direct interest and open eyes (and doors) to future jobs.

Even the university student bends his academic mind to a future career. If he studies modern classics with a view to teaching Greek or Latin at a secondary school his educational aim could certainly be described as vocational. That particular aim might even be regarded as vocational training i.e. not in the mainstream of general education at all.

We do not need to press our argument quite so far as to regard all education as vocationally aimed. Of course it is not. Yet we come closer to reality if we see some aspect of vocational aim in much of the educational process, than if we pretend that all our pupils and all our students are fervently studying education for its own sake.

We set out below an analysis of the anticipated direct utility to secondary school pupils of teaching them economics. In each box where a cross is shown, the representative of the country concerned has indicated his country's concern for the educational aim shown in the list of objectives (left hand columa).

TABLE 1 - The aims and objectives of teaching economics - Direct utility

List of Objectives	A	B	CY	DK	F	D	I	L	M	NL	N	S	CH	GB
Preparation for higher education		x	x	x	x	x	x	x	x	x	x	x	x	x
Vocational training for industry	x		x			x	x		x			x		x
Vocational training for commerce	x	x	x			x	x		x			x		
Vocational training for accountancy	x	x	x			x	x		x			x		
Preparation for career	x	x	x			x	x		x			x		x

It is immediately apparent from these declared utilitarian aims that preparation for some form of higher education is the most consistently specified aim throughout the European countries covered by the survey except for Austria. In Austria, economics occupies a place in commercial education but, so far, no specialised economics is taught in the academic secondary school.

The academic respectability of economics revealed by the survey is of relatively recent origin. Economics, as an academic study, was for long largely restricted to the university. Even now, the academic economics of the university is by no means structurally related to the academic economics of the secondary school. Thus, university teachers of economics do not always regard a study of economics at the secondary level as suitably qualifying a pupil for admission to a university course in economics. Fortunately, the subject of economics at the secondary level is becoming sufficiently academically respectable for it to be acceptable by some universities as an appropriate part of a terminal secondary examination qualifying for admission to many different faculties. Current practice in this acceptance varies very much from country to country. In the United Kingdom, economics could form one of three subjects examined at the advanced level of the General Certificate of Education. In France and the Federal Republic of Germany as in most other European countries, economics would occupy a smaller proportion of a much wider examination containing may subjects, such as the Baccalauréat or the Abitur.

When we look at the survey to discover the relative importance given to vocational training, it is obvious that the countries divide into two very distinct groups. Austria, Belgium, Cyprus, Federal Republic of Germany, Italy, Malta and Sweden manifestly use the teaching of economics as a lead into vocational training. In most cases, this vocational training covers all three of the major types of vocational training, i.e. for industry, commerce, and accountancy. The United Kingdom also indicates that the study of economics forms part of vocational study for industry, though not for commerce

and accountancy. There is a particular reason for this difference between the United Kingdom and the other European countries listed as using economics as a lead subject towards vocational training. The reason is that, unlike most European countries, the United Kingdom has a large number of professional institutions, such as those for accountancy or banking or statistics, which provide a form of education for their own trainee members, and award their own professional qualification to those members who successfully pass an examination when they have completed their training and education in the particular professional specialism. Accountants, bankers or statisticians, among many specialists in commerce or accountancy, are trained and educated much more through the higher educational system on the continent of Europe than in the United Kingdom.

It is of some significance that Denmark, Norway and Switzerland, accompanied by France, Luxembourg and the Netherlands exclude vocational training as an aim for those studying economics. The probable explanation is that those countries differentiate more sharply between academic economics and vocational commerce. Had we asked those countries if they included "commerce" i.e. a study of the basic commercial facts of economic life, it is possible that they would have indicated vocational training as an aim for commercially orientated education.

It is, however, equally important to notice that those same countries do not list the study of economics as preparing for a career, so we can reasonably assume that the countries concerned (Denmark, Norway, Sweden, France, Luxembourg and the Netherlands) normally expect those pupils studying academic economics to go on to some form of higher education.

Intellectual training

It is a well-established condition of educational acceptance that a subject should contribute to intellectual training. Yet it is not always easy to state what is meant by intellectual training. Does it simply mean using a mind better ? Or are there specific mental skills or agilities which can be identified ? Fortunately for this study, we have access to a very detailed analysis of the skills incorporated within the title "Intellectual Training". The analysis is set out below.

TABLE 2 - The aims and objectives of teaching economics - Intellectual training

	A	B	CY	DK	F	D	I	L	M	NL	N	S	CH	GB
1. Examination of concepts and their limitations														
- relativity of economic ideas		x			x	x	x	x		x		x	x	
- critical review of experience, observation and preconceived ideas										x		x	x	
- limitations of economics						x				x		x	x	

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	A	B	CY	DK	F	D	I	L	M	NL	N	S	CH	GB
2. Knowledge and understanding :														
- economic history			x						x			x	x	x
- workings of society	x	x	x	x	x	x	x	x	x	x	x	x	x	x
- workings of main economic institutions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
- structure of industries	x		x	x	x	x	x	x	x	x	x	x	x	
- role of government in economy		x		x	x	x	x	x	x	x	x	x	x	x
- European interrelationships of state		x	x	x	x		x	x			x	x	x	
- international relations of state	x			x						x	x	x	x	
- economic terminology		x	x	x	x	x	x	x	x	x	x	x	x	x
- economic theory			x	x	x	x	x	x	x	x	x	x	x	x
- elements of economic analysis	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3. Application of knowledge to economic problems														
- use of elementary tools of analysis				x					x	x	x	x	x	x
- ability to handle simple statistical procedures		x	x	x	x		x	x	x	x		x	x	x
- use of works of reference				x				x				x	x	x
- elementary quantitative study												x	x	x
4. Formation of mental habits														
- observation			x		x	x	x	x	x	x	x	x	x	x
- evaluation			x		x	x	x	x	x	x	x	x	x	x
- judgement of logical accuracy and consistency			x			x				x	x	x	x	x
- memory			x								x		x	
- critical spirit		x	x	x	x	x	x	x		x	x	x	x	x
- experiment		x			x	x	x	x					x	
- independent work			x		x	x		x	x	x		x	x	
- ordering material				x	x	x	x	x	x	x		x		x
- synthesis						x		x	x			x	x	x
- desire for involvement						x			x			x	x	

Four major divisions of intellectual training are identified. There are :

1. Examination of concepts and their limitations ;
2. Knowledge and understanding ;
3. Application of knowledge to economic problems ; and
4. Formation of mental habits.

It will be illuminating to glance at each of these four divisions in turn, in order to discover how far the various countries listed differ in their approaches to each division.

The examination of concepts and their limitations

The examination of concepts divides the countries broadly into two groups. Most of the countries listed expect to develop, through economics teaching, an understanding of the relativity of economic ideas. By contrast, the Netherlands, Switzerland and Sweden expect a critical review of experience, observation and preconceived ideas. Those three countries, in addition to the Federal Republic of Germany, look for an ability to understand the limitations of economics.

The real division here lies between those countries in which the university level of economic understanding has moved down towards the schools and those in which it has not. At the level of theory and of critical analysis, economics is not an easy subject for school children to understand. It is possible that a significant level of maturity is required before some young people can fully understand the relationship between economics and politics, or before sufficient personal experience has been gained to be able effectively to offer a "critical review of experience, observation and pre-conceived ideas in economics". It is on these grounds, as we have seen, that some university teachers oppose the teaching of economics in the schools.

In the United Kingdom, where there has been a steady transfer of the academic levels of economic study down into the schools, it is significant that there is no reference in table 2 to a deliberate intention of expecting young people even at the age of 18 + to be ready to examine concepts of economics and their limitations. Such high level critical abilities might be sought in the special or "S" examination papers set in the United Kingdom and designed to discover the most outstandingly gifted students. But, at the normal terminal secondary level examination, i.e. Advanced level of the General Certificate of Education, the examiners in the United Kingdom would not normally expect the average student to be capable of this high level of intellectual capacity.

Knowledge and understanding

We meet more familiar, and generally acceptable educational aims when we look at the analysis of knowledge and understanding.

The pattern of involvement by most countries is very clear. Apart from a relationship to economic history, and an understanding of the international relations of state we can see that most of the European states listed adopt a broadly similar pattern of aims in teaching economics. Austria shows several gaps simply because, at present there is little study of academic economics at the secondary level. More serious is the notable omission of the United Kingdom to incorporate any specific study of a European inter-relationship of state. The Netherlands and the Federal Republic of Germany show the same omissions. Some moves are now in progress to remedy this startling omission by the United Kingdom. Perhaps the Netherlands and the Federal Republic of Germany will find a

necessity for aiming more specifically at a Europeanisation of economic studies as the economic integration of the European Common Market becomes more effective.

The relative unimportance accorded to economic history and to international relations of state probably derives from the same source i.e. that syllabuses of study become progressively overloaded with the current explosion of knowledge. Hard pressed teachers must limit the areas of study to be covered by their pupils over a given period of years. No doubt, every professional economist needs a background knowledge of both economic history and international relations of state. Similarly, every student or pupil would enrich a study of economics by supporting it with economic history and international relations of state, but we have under consideration the average secondary school pupil, aged eighteen or thereabouts. That average pupil may be expected to study, throughout Europe, anything between three to ten subjects for his terminal secondary examination. A given amount of time is allocated for economics, and there are higher priorities than economic history and international relations of state, such as those categories of knowledge and understanding generally approved by the countries listed in table 2.

Application of knowledge to economic problems

Knowledge and understanding are rightly followed by an ability to apply that knowledge and understanding.

Section 3 of table 2 sets out four sub-divisions of intellectual skills relative to the application of knowledge to economic problems. Here we find wide disparities between the practice in different countries. Almost all countries listed support the aim of inculcating an ability to handle simple statistical procedures, but five countries only (Denmark, Luxembourg, Switzerland, Sweden and the United Kingdom) expect their pupils of economics to be able to use works of reference. This skill is becoming much more supported in the educational method of other specialist subjects, such as history or geography, for the obvious reason that the ability to use works of reference is a necessity for any future career with an intellectual content.

It is even more regrettable to find that a demand for the use of elementary quantitative procedures is stated by three countries only, Switzerland, Sweden and the United Kingdom. The quality of numeracy is certain to be required more and more in the future. Economics should not stand still, immersed in its theoretical concepts, but should aim, for its own social consequence, at quantifying those concepts, and thus bring a dimension of reality into an essentially pratical aspect of business life. Fortunately, the limited number of supporters for the use of elementary quantitative study is offset by the much more widespread insistence upon the ability to handle simple statistical procedures.

Formation of mental habits

When we come to consider how far intellectual training can result in the formation of suitable mental habits, we leave subject studies for wide vistas of educational philosophy. Economics as a special subject study is in theory unlikely to be any different from any other academic discipline in its capacity to form desirable mental habits. Nevertheless, in fact there is a dimension of reality about the subject of economics which makes it particularly suited to the formation of mental attitudes which will support success in the management of life. The word "economics" after all is a direct derivate of a Greek word meaning "household management". Standard definitions of economics usually include the necessity of choosing how to use scarce resources for alternative ends. Economics is part of the pattern of existence. Success in the formation of mental habits through economics is likely to support success in the management of life.

We can see at a glance from section 4 of table 2 that the European countries listed express general support for the mental qualities of observation, evaluation and critical spirit. Almost equally generally accepted are independent work, the ability to set out material in a logical order (ordering material) and the capacity to experiment. Sweden draws special attention to the value of independent work. This strong support is shown in table 2 by the bracket drawn around Sweden's listing.

Higher levels of intellectual capacity, such as synthesis, or judgment of logical accuracy and consistency, are somewhat less supported, perhaps because in some countries these qualities seem to belong to levels of education higher than secondary.

The two qualities obtaining least support are memory, and the desire for involvement.

Memory is regarded in education as a poor relation. The poor relation is always with us. He (or she) may have to be supported. Yet we may turn the other way if we see him approaching us. If the subject comes up for discussion, we quickly turn to some other topic. Why is this ? Memory is an essential part of everyday life. If we could remember all we had ever learned we should not only be more effective economists, we should probably be more efficient citizens - and we might even be able to economise on the scarce resources we now use in education. Memory is always associated by educationists with "rote" memory i.e. for educationists, memory has come to mean the more repetition of fragments of knowledge which are regurgitated by the learner without an ability to utilise the facts in a creative and imaginative way. Of course, no responsible person would support memory work of this kind as a major aim of education. Nevertheless, life would be insupportable if we did not commit a considerable number of pieces of information to our personal memory banks. Somehow, our memories must become, or be trained to become, reasonably efficient. Perhaps therefore those three countries, (Cyprus, Norway and Switzerland) which support the need to form a good mental habit of remembering are not quite so backward looking as some educationists would have us believe.

The last entry on table 2 is probably the most socially significant. Under the heading of the formation of mental habits the countries' representatives were asked to state when their educational aims included that of creating a "desire for involvement". It is most unlikely that such a topic would have been discussed as recently as five years ago. Yet we find that the Federal Republic of Germany, Malta, Sweden and Switzerland include desire for involvement as a desirable mental attitude to be supported through the study of economics. This relatively new concept, as part of educational policy, has arisen because of the stress which sociologists lay upon the need to integrate the individual within society. Urbanisation, the growing size of the employing unit, the declining impact of religion have all contributed to the loss of identification with the group which gave a sense of security to the individual. It is probably right that education should aim to re-establish both the importance of the individual, and the equal importance of his functional and cultural involvement in the society within which he lives and works. In this context economics is a very suitable subject through which to inculcate a "desire for involvement".

Cultural aims

It is fascinating to speculate on the meaning of "cultural aims" of education. If we could obtain an interpretation of the phrase from educationists in (say) the United States of America, and the Union of Soviet Socialist Republics we might understand better the tensions which arise between those two countries. Tensions between peoples or states are not solely a function of political or economic conflict. The conflict can only be sustained if the cultural background and educational aims of the societies concerned permit the peoples of different countries to regard themselves as so unrelated to each other as members of the human race that, as a last resort, and in times of fear and danger,

they are prepared to fight and kill each other.

If we bear in mind this cultural and social context, it is with some pleasure (and some relief) that we find countries of Europe setting out cultural aims for the teaching of economics which clearly (though cautiously) tend towards an understanding of other peoples.

We set out below, in table 3, the cultural aims of teaching economics as expressed by the listed countries.

TABLE 3 - The aims and objectives of teaching economics - Cultural aims

Description of cultural aims	A	B	CY	DK	F	D	I	L	M	NL	N	S	CH	GB
1. Culture générale - understanding of world in which we live		x	x	x	x	x		x	x	x	x	x	x	x
2. 'Economic literacy'	x		x	x		x			x		x	x	x	x
3, Promote cooperation with fellow men as a member of society	x	x	x			x					x	(x)	x	
4. Promote love of one's country	x		x										x	
5. Promote a political awareness						x		x				x	x	
6. Aid character training	x		x			x				x	x	x	x	
7. Train citizens capable of reasoned judgement and responsible decision	x		x			x				x	x	x	x	
8. Promote interest in and study of human, moral, social and political questions associated with economic topics			x			x				x		x	x	
9. Analysis of experience					x	x		x	x	x		x	x	

Note : The bracket round x , i.e. (x) under the heading Sweden, and beside column 3 means that Sweden places particular emphasis on the promotion of co-operation with fellow men as a cultural aim of education.

Table 3 shows that there is general acceptance among the European countries listed, of aiming to encourage pupils to acquire an understanding of the world in which we live, or a "culture générale". This laudable aim, however, can only be effective through a subject study such as economics, if the syllabus specifically goes beyond teaching about the economics of the pupils' own country. We shall endeavour to relate the practice of the syllabus to the aspiration of the cultural aim in chapters III and IV.

"Economic literacy", listed in column 2 of table 3 simply means that pupils should be trained to understand, in their capacity as citizens the economic circumstances in which they live. This would imply that an economically conscious citizen could read and understand articles about economics in newspapers and in non-specialist journals. It would imply that the apparent mysteries of deficit spending by the state, or devaluation of a country's currency, or inflationary wage claims should cease to be mysteries and become part of the pattern of thinking of the citizen. Most of the countries listed give support to the aim of instilling economic literacy.

The remaining cultural aims set out in table 3 are sought by different groupings of countries. It is inevitable that some countries continue to regard the inculcation of political awareness with some suspicion. Too often has education been used as a means of instilling political convictions into unsuspecting children. However, a reasoned politic consciousness is a sensible aim once we reach the upper secondary level of education. It is not unreasonable to expect young people between the ages of fifteen or sixteen and eighteen to be encouraged to distinguish between political viewpoints, and we cannot expect critical understanding of different political viewpoints unless senior pupils are enabled to discover the bases of the different political views held.

Even so, we find that four only of our listed European countries are yet ready to promote a political awareness as an aim of economics teaching. The four countries are the Federal Republic of Germany, Luxembourg, Sweden and Switzerland.

Happily, seven countries support the promotion of co-operation with fellow men as a member of society. Economics is a particularly suitable subject for the development of this aim. Despite the surface tensions of competition between different economic units, there is an underlying mutuality of advantage in that, as citizens we all share in the total of production. This principale applies whether we regard ourselves as citizens of one country, or as citizens of the world. We may criticise the distribution of wealth or income within a country, just as we may prefer a more equal distribution of economic income between countries. This distribution of wealth or income is, in itself, a product of political or economic philosophy and is already becoming a little less inequitable through the growing consciousness of man that the world is essentially one economic unit of interdependent countries.

Whether it should be an aim of economics teaching to inculcate a love of one's own country seems to be doubtful from the small number of countries mentioning this aim. Austria, Cyprus and Switzerland are not averse to teaching a love of their countries. It is almost certainly true that all the remaining European countries are equally ready for the educational system to incorporate a sense of belonging to the local community. Indeed we have already seen that some countries deliberately set out to encourage an awareness of involvement. This involvement could, of course, be an involvement with mankind in general, but such nebulous concepts are not easy for the individual to grasp. It is much easier to nurture an involvement with the school, the neighbourhood, the region or the country before leading young people to their inescapable, though shadowy, involvement with mankind.

Educational objectives

The detailed aims and objectives of teaching economics which we have set out above have broadly been divided into three major areas :

1. direct utility,
2. intellectual training, and
3. cultural training.

These aims and objectives can be seen as the outcome of an underlying social philosophy which educationists would like to see expressed, developed and supported through the educational system.

It may be necessary, however, to re-define these aims in terms of the educational skills or qualities which we should expect the teachers to bear in mind when drawing out (for that is the meaning of "education") from their pupils the best that is within them.

B. S. Bloom, Professor of Education at the University of Chicago, has set out a classification of educational objectives which has gained interest, and some support in many countries.

The Oxford University Department of Educational Studies suitably adapted those aims, and placed them before the representatives of the European countries we are here considering.

These educational objectives may be summarised as follows :

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

Each of these qualities can be elaborated upon and we shall aim to expand the classification with explanatory detail when we set out the general conclusions reached about these aims by the national representatives.

It must be said that this classification of educational skills does to some considerable extent fit the experience of many teachers. The skills are applicable over a wide range of subjects, and can certainly be tailored to fit the specialist subject of economics. The working party of the English speaking group at the 1970 Council of Europe meeting on the teaching of economics agreed that the classification (i. e. taxonomy) was a useful tool available to teachers when planning the economics curriculum. The delegates felt that the use of the classification lay in its power to identify elements of teaching. This approach could be expected to assist teachers in their categorisation of teaching materials.

A similar line of thinking led to support for the classification as an aid to the construction of test material. On the other hand, it was felt to be misleading, and therefore dangerous to apply the classification too slavishly to examination questions set externally from the school.

Further limitations to the use of the classification of educational abilities were suggested by the English speaking groups of delegates. (They represented Norway, Malta, Netherlands, Turkey, Cyprus, Federal Republic of Germany, Denmark, the United Kingdom, Sweden and Ireland). But in order to place these limitations within a meaningful context we shall now set out the full classification

as revised by the French speaking group of delegates.

The French speaking group of delegates included those from France, Switzerland, Italy, Luxembourg, Belgium and a representative of the Council of Europe.

That group very carefully considered the draft outline of educational classification, and came to general agreement on the following.

TABLE 4 - Example of a taxonomy (classification) of educational goals - economics

I. Knowledge	Facts and data, e.g. demographical statistics.
	Progressive initiation into the terminology, i.e. delimitation of meaning of economic terms, e.g. investment, financing from the resources of the firm.
	Methods of presentation of documentation, e.g. graphs, curves, histograms, etc.
	Knowledge of classifications and of categories, e.g. factors of production.
	Knowledge of relationships recognised as essential, e.g. the wages-price relationship.
	Knowledge of fluctuation and sequences in relation to time, e.g. inflationist tendencies and their effects on the standard of living, etc.
	Knowledge of criteria allowing one to verify or to judge facts, e.g. application of the cost of living index.
	Methodological knowledge, e.g. methods for establishing a balance of payments.
	Knowledge of abstractions which are derived from observation, i.e. basic economic laws, e.g. the law of diminishing returns.
	Knowledge of theories and structures, e.g. inter-action of economic laws.
II. Comprehension	Translation, i.e. the ability to furnish concrete examples of abstract situations, e.g. graphs, statistical formulae.
	Interpretation, i.e. the ability to draw valid conclusions from a complex of basic data.
	Extrapolation, i.e. the ability to determine the implications or the consequences of a given conclusion.
III. Applications	Applications : i.e. the ability to apply a basic economic law to a given situation.

IV. Analysis	Analysis : i.e. the ability to identify and to recognise the function of all the elements in a given situation in order to determine relationships between them.
V. Synthesis	Synthesis : i.e. the ability to co-ordinate elements in support of a hypothesis.
VI. Evaluation	Evaluation : i.e. the ability, on the one hand, to evaluate with logic and accuracy (internal criteria), and on the other hand, by referring to basic economic theories (external criteria).

This classification of educational goals in terms of economics can be no more than the broadest general outline for a teaching strategy. Nevertheless, there is some value for all teachers of any given subject, in an effort to clarify the aims of teaching that subject. Syllabus aims are comparatively easy to identify for the syllabus can usually be made available in a written form. Educational aims in terms of the use of skills of the mind are far harder to identify because the attempt has rarely been made to agree upon, and publish such aims.

There is yet a further category of aims in the minds of teachers. That aim may be crudely stated in terms of achieving success in enabling their pupils to pass examinations. Of course, most teachers may give a very limited priority to such a utilitarian aim. Such teachers would aim to transfer the best of educational idealism into their pupils. Nevertheless, those pupils themselves have educational aims, and amongst those aims pupils give very high priority to the recognition of successful achievement through success in examination.

It is the educationist's duty to provide a framework of teaching and learning within which pupils can both gain a good general education and, at the same time wherever possible, gain examination success.

Perhaps this complementary nature of the educationist's aim was present in the minds of the English speaking group of delegates when they suggested some limitations to the use of the revised taxonomy set out in table 4. These limitations were as follows :

i) there may be little reliability in attributing what is written in an answer to a particular category of the taxonomy. For example, an aspect of learning expressed in writing and categorised by an examiner as "analysis" may in fact have arisen from a simple "recall of knowledge". This distinction might well arise from the learning situation.

ii) the examinee may have used "analysis" in order to answer a given question, even though the examiner may have categorised that answer as "recall of knowledge".

iii) it is possible to construct examination questions, using a taxonomy, the answers to which can be approached only through valid analysis.

iv) in economics, in particular, rigid adherence to a taxonomical approach when constructing test material may often preclude the setting of that type of question which requires a truly expository, creative answer.

These reservations indicate a healthy scepticism among European educationists about the possibility of designing too rigid a classification of educational objectives. This scepticism also rests upon a criticism of objective testing as a means of examining candidates. Please see chapter VIII for a discussion of methods of assessing candidates.

Objective testing means the formulation of examination questions which have one correct answer only i.e. such questions are not open to a subjective assessment by the person marking the examination papers.

The case for a component of objective testing will be considered in chapter VIII. For the moment however, it is important to consider the reservations expressed by European educationists to objective style examination questions based on a classification of educational objectives. It is well understood that objective style tests are based on short questions, often offering a choice of possible answers, from which the candidate must select the right one.

In economics, such examination questions may very well fall into the trap foreseen by the educationists, i.e. that rigid adherence to a taxonomical approach when constructing test material may often preclude the setting of that type of question which requires a truly expository, creative answer.

Fortunately there is no necessity to give up either the precision thinking and objective marking of objective tests, or the exposition and creativity of other forms of written examination. Both types of examination should be included in a more highly developed scheme of examinations. A multi-sided examination structure might include a component of oral testing, or written (essay-style) testing, objective testing and an assessment of course work.

Weighting educational objectives

Even if it were felt to be generally desirable to have a multi-sided examination structure, it would still be essential for teachers to decide upon the relative weights to be accorded to these components.

In the study of modern languages it is a matter of continuing controversy to decide on the percentage of a final mark to be allocated to an oral test. Should the oral test earn ten per cent of a final mark ? Or twenty per cent ? Or even fifty per cent ?

Similary, in economics it may well become necessary to decide upon the relative weighting (i.e. importance) to be attached to an objective test, an oral test, a written test and an assessment of course work.

In the United Kingdom one aspect of this problem has been faced by the Associated Examining Board which examines for the General Certificate of Education. That Board has recently introduced, in co-operation with the University of London University Entrance and School Examinations Council , a component of objective testing into the economics examination at the Advanced level of the General Certificate of Education. How much weight in terms of examination marks should be allocated to the objective test, and how much to the remaining examination component which is an essay-style written test ?

The two boards consulted groups of teachers and examiners and finally decided to allocate fifty per cent of the final examination mark to the objective test and fifty per cent to the written test.

It will be obvious that this view is unlikely to be universally acceptable. Some teachers might well have preferred a ratio of forty per cent to the objective test, and sixty per cent to the written test.

Decisions of this character may become even more important if economics examining incorporates even wider aspects of testing, such as an oral assessment or a course assessment. All these different types of assessment are currently used in different countries of Western Europe. There is no uniformity of weighting applied to the different components of the final examination.

It may well be argued that uniformity is undesirable in education, and so in many respects it is. But we may have to give more attention in future to a similarity, or comparability, of educational qualification to enable citizens of Europe to move easily from school in one country to university in another. Within Europe, uniformity of educational structure must, for many years, possibly for several generations, remain far removed from achievement, but moves designed to make the examination structures nearer to similarity between the countries concerned can only help the future educational achievements of all the pupils of all the countries.

Weighting the educational objectives of components of a multi-sided examination structure is not the only problem of deciding relative importance in the subject of economics. It is also necessary, especially in the area of objective testing, to decide upon the relative importance of the educational skills named as desirable in a taxonomy of educational aims.

We could perhaps ask our examiner to give equal weight to the six major educational aims identified by Professor Bloom, i.e. one-sixth of total examination marks each to : Knowledge - Comprehension - Application - Analysis - Synthesis - Evaluation.

Alternatively, we might, in the subject of economics, ask groups of teachers and examiners to consider Bloom's taxonomy and to recommend how that classification of educational aims should be applied to a given examination, and to recommend the weighting to be attached to each recommend aim.

In the United Kingdom the Associated Examining Board and the University of London University Entrance and School Examinations Council undertook exactly the exercise postulated above. Their teachers and examiners made the following recommendations :

TABLE 5 - Economics GCE Advanced Level

Educational Aim	Examination Weighting
1. Recall, Factual knowledge and understanding	30 %
2. Application	40 %
3. Analysis and evaluation	30 %

It will be seen that the teachers and examiners have telescoped Bloom's six categories into three, i.e. : 1) Recall,
Factual Knowledge and understanding
2) Application and
3) Analysis and evaluation.

Synthesis has not been included as a separate category at all, perhaps because this educational skill may be more appropriately examined at the tertiary, rather than at the secondary level of education.

It will also be noticed that the teachers and examiners in this example have not decided upon recommending an equality of importance for the three categories of educational aims. Categories 1 and 3 are intended to receive an examination weighting of 30 % while category 2 receives 40 %.

This quantitative approach to the value judgements of educational aims still seems relatively unusual. Yet such a quantification might appear to be a necessary pre-condition of a process by which teachers and learners are made more consciously aware of the aims of education in any given subject. This heightened consciousness can surely serve only to improve the efficiency of that transmission of cultural heritage which is a prime purpose of every teacher.

Transmission of a cultural heritage

The sociologist's view of education is that one of its major purposes is the transmission of a cultural heritage. "Culture" in this sense includes all the traditional patterns of thought and behaviour which are normally transferred from one generation to the next. In primitive societies the parents, or parent-substitutes such as uncles or priests, are the agents for this cultural transfer. In modern developed societies, the educational system provides the major transmitting agency while parents play a complementary but minor, and on the whole declining, role.

Despite its relative newness as a subject for school education, economics is not without its value as a transmitter of knowledge and experience from one generation to the next. Economics already provides its own perspective of history. Economic history is, in several countries, associated with the teaching of theoretical economics. Economics brings its own conspectus to bear upon attitudes to life in general. Economic man may not express philosophical aims of a grand design for mankind. But economic man can acquire a sense of unity with mankind. Even in terms of ethics and morality, economics can offer something to help human beings to understand themselves. For the ethics of the market place are permeated by and tempered with the ethics of society. The morality of economic welfare brings a progressive taxation system to require a practical reality in the concern of privileged man for under-privileged man.

Education in economics then is not to be considered as that "dismal science" feared for its logic of inhumanity by the economists of the nineteenth century. Economics is a social science. In the late twentieth century economics may even claim for its aims a place within John Ruskin's view of education. Education, he argued, was not to enable people to know more than they knew, but to become better than they were. The cynic will add that economics is to enable them to become better off than they were. If this were solely the purpose of teaching economics we might well question its place in the schools, but the wide-ranging, socially-orientated aims of teaching economics we have been able to discuss in this chapter manifestly contradict this cynical view. The teaching of economics is shown with a well-balanced mixture of utilitarian intellectual and cultural aims drawn from the educationists of many European countries, offering secondary education a topic as human as man, and as social as interdependent societies. Europe itself may well be in the process of enabling European economic man to find his place within the European interdependent societies.

C H A P T E R I I I

THE STRUCTURE OF THE SYLLABUS

The aims of education ought, in theory, to be attained through the syllabus of the given subject. In fact, syllabuses spring from many different minds and many different sources.

The state could lay down a uniform syllabus for each subject taught in its schools, but, in fact the state scarcely anywhere in the world attempts such detailed centralisation.

The educational administrators for a given local authority area, or region or province, could determine the syllabus of subjects for their area. The teachers provide another source of syllabus makers. Examining bodies, professional associations, groups of employers and employees may, in different countries and different areas, play a part in making a syllabus. Not least among these many syllabus makers are the examination papers themselves. Examination papers should spring from a syllabus, and usually they do, but examination papers also interpret a syllabus, or select from a syllabus or, consciously or unconsciously, bring a syllabus up to date.

It is not easy then to determine the source from which a syllabus is made. Each syllabus must be examined on its own. Its source and origins must be traced. Its interpretation analysed. Its application revealed.

Syllabuses have a capacity for growth - and a danger of decay. For if a subject advances past a syllabus, then the syllabus progressively becomes out of date, until a derisory syllabus endangers the attraction and academic respectability of the subject itself.

All this means that syllabuses need careful thought and continuous revision. We shall in this chapter set out to discover how far economics syllabuses in Western Europe are suitably designed to fit the needs of their users.

Philosophy of a syllabus

The structure of any subject syllabus springs largely from the prevailing philosophy about the subject in the minds of the syllabus makers. Indeed, this principle is true of any educational system. Political philosophy is not so overtly expressed in the countries of Western Europe as it is in those of Eastern Europe. Nevertheless, there is a prevailing political philosophy in Western European countries. That political philosophy permeates all aspects of life, and provides the infrastructure to the educational system.

The subject of economics is particularly closely intertwined with political philosophy. The political philosophy of those countries with wholely socialist governments produces an economic structure for those countries which is wholly planned and, in principle, is committed to public ownership of the means to production. The political philosophy of a country committed to private enterprise will exhibit an economic structure designed to maximise private enterprise as a means to production and to minimise the economic intervention of the state.

Between these two extremes lie virtually all the countries of Western Europe. Each has a "mixed" economy consisting of varying ratios of private enterprise sectors to public enterprise sectors of the economy.

It is to be expected then that the syllabus for the subject of economics prepared by Western European countries should exhibit the mixed economies of the countries concerned. So, for example in Austria, the Handelsakademie provides a vocationally orientated course which places emphasis on the acquisition of business techniques and the understanding of practical economics.

More theoretical and more academic France expects the teaching of economics to be combined with social science. Secondary school pupils in France should study such topics as the family, population growth, occupational distribution and consumption. These pupils will proceed to a study of the national economy and are expected to gain an insight into the structure of society. French idealism is expressed in the wish that different types of economy should be explained and that, in particular, attention should be paid to liberal and socialist economic policies.

Similar philosophically motivated aims for the economics syllabus can be seen for example in that recommended in the Baden Württemburg Land of the Federal Republic of Germany. Here it is suggested that the economics course should aim to educate pupils to be thoughtful and judicious, and capable of making responsible decisions in their private, public and political lives. In the related economic geography subject, the same pupils are to be shown how isolationist policies harm the economy and how free trade and fair exchange of goods make for good understanding and prosperity.

Sweden's approach is very practically orientated. It aims to provide the pupil with a good knowledge of the structure, resources and functions of business enterprise. Philosophically motivated Norway, however, does not teach economics as an academic discipline at secondary school level, but, through its course in social economics aims to train the students to understand how everyday life and activity depend upon, and are dominated by, economic problems. The social economics programme also aims to show how opposing interests between individuals, groups and nations are, to a high degree, attributable to economic opposition and problems, and that economic co-operation may largely remove or reduce such opposition.

In the commercial lycées of Turkey the academic economics course is designed to enable "the children of a nation which deeply feels the necessity of economic development" to

a) acquire an adequate knowledge of economics ,
b) acquaint himself with the economic problems of Turkey ,
c) take an active interest in the economic problems of Turkey , and
d) take a constructive part in the economic life of the country.

By contrast, the girls' Institutes in Turkey concentrate on "budget-buying and selling". These students are expected to learn

a) how to make a family budget ,
b) to develop a sense of collaboration in the family to raise the family income ,
c) to invest in order to attain security , and
d) to contribute to family income either by making money at home, or outside.

If we turn to Belgium, with its strong sense of the importance of private enterprise, we can nevertheless find an idealistic aim in the teaching of economics. No economic activity, however productive it may be from the material point of view, can be recommended if it runs contrary to the laws of conscience. Speaking from the social point of view, all economic systems should be organised around the concept of justice. In this way, study of those institutions which may improve working conditions and diminish risks, draws attention to those moral laws which should govern the distribution of wealth. Thus runs a Belgian report on the teaching of economics at the upper secondary level of education.

Empirical United Kingdom reveals little of its political philosophy in the report of its delegate on the teaching of economics. The economics course is to give the pupil a training in certain intellectual skills and habits, to help him to understand the world around him, and prepare him for adult life, both at work and as a member of society. The main cultural aim of the course is for the pupil to gain an "informed commonsense".

These extracts from the reports of delegates from the several countries can be no more than selections from much wider and deeper statements of the aims of teaching economics. The selections do, however, serve to emphasise the fact that there are profound differences of political and social thinking among the countries of Western Europe and that some of these differences become expressed through the educational systems. We must then expect that the philosophy of syllabus formation for any given subject will bear some imprint from the prevailing political and social philosophy of the country or region which prepares the syllabus.

Analysis of Economics Syllabuses

For the purpose of analysing the economics syllabus of the co-operating European countries, the Oxford University/Council of Europe study group divided the subject of economics into ten broad topics. These were :

1. History of Economics/ general concepts/scarcity and choice
2. Production
3. Distribution
4. Theory of price, supply, demand and markets
5. National income and its measurement
6. Macro-economic theory
7. Economic organisation
8. Money and banking
9. International economics
10. Economic activity of the state

Before going on to consider a detailed subdivision of these ten main topics of economics, it may be illuminating to draw some very general conclusions about these main topics from the information provided by the delegates.

In topic 1, it is clear for example that none of the countries concerned requires school pupils to undertake a detailed study of the history of economics. Six of the countries, Belgium, France, Federal Republic of Germany, Ireland, Switzerland and the United Kingdom expect some attention to the history of economics, but this aspect of the syllabus is not rated highly in importance.

Most countries of Western Europe expect pupils of economics to study the general concepts of economics, and a broad approach to scarcity and choice. A more detailed study of this aspect is required by Cyprus, Denmark, Ireland, Italy, Luxembourg, Malta, Netherlands and Switzerland.

Topic 2 covers production, and we find that most countries expect a fair amount of attention to be paid to this aspect. Belgium, France, Ireland and Malta have particularly detailed syllabuses. France, not unexpectedly, lays special emphasis on the study of population, because the French

syllabus is described as economic and social sciences. Sweden expects special attention to the objectives of business enterprise and the entrepreneur, and also incorporates some very practical studies in office rationalisation and automatic data handling.

Distribution, the third topic, rates rather low in importance except in those countries like Sweden, some Länder of the Federal Republic of Germany, Belgium, Italy and Norway, where the course of study appears to incorporate a practical orientation. Such topics as market analysis, or operational organisation are given little or no attention in Cyprus, Denmark, France, Luxembourg, Malta, the Netherlands, Switzerland and the United Kingdom.

Topic 4, Theory of Price, Supply, Demand and Markets, achieves very general support. Only the rather technical sub-topic of the use and application of indifference curves is relatively unsupported.

The study of national income (topic 5) also receives widespread interest and support. France gives less attention to the sub-topics of the theories of distribution, rent, wages, profit and interest. By contrast Sweden devotes little attention to national income study but does include the theory of distribution.

Macro-economic theory (topic 6) is everywhere important in the syllabus structures except in practically-minded Sweden. In Sweden, economic interest for the secondary school stage of study is primarily in the area of micro-economics, i.e. the study of the economy of the firm rather than the economy of the state.

Topic 7, economic organisation and topic 8, money, both attract widespread general support in syllabus building. Economic organisation, with its micro-economic philosophy, is accorded special emphasis by Sweden and Switzerland. In the money and banking area, the sub-topic of comparative banking is studied at secondary level in Italy and the Netherlands only, though there is some limited interest in Ireland and the United Kingdom.

The importance of international trade to the countries of Western Europe is well revealed by the large number of sub-topics covered in syllabus content under the general heading of International Trade. The theory of comparative costs, restrictions on the freedom of trade, the balance of payments and foreign exchange, all feature prominently as sub-topics in international trade. Within this major topic there is also general support for a study of currency areas, advanced economics, developing economies and economic aid.

Finally, the economic activity of the state (topic 10) has fairly general support, although Denmark does not cover the sub-topic of "laissez-faire versus the planned economy", and Sweden excludes the sub-topics of state regulation of industry and management of the economy. No doubt in Denmark and Sweden, these areas of economic study are fully explored at the university level of education.

Relative importance of major economic topics

Before leaving the analysis of these topics we can also discover the relative importance given to the ten major topic divisions of economics by the participating countries.

Each country's syllabus was carefully analysed into the proportion of sub-topics (there were 427 sub-topics for the ten major topics) which found a place in the major topics of the syllabus. Table 6 below gives the generalised conclusions of this analysis for the Western European countries.

TABLE 6 - Distribution of sub-topics of economics over the total syllabus

Major economic topic	Percentage of total syllabus in each major topic
1. Production	18
2. Theory of price, supply, demand and markets	16
3. Money and banking	12
4. National income and its measurement	11.5
5. Economic organisation	11
6. Macro-economic theory	8
7. International economics	7.5
8. Economic activity of the state	7
9. History of economics etc.	5
10. Distribution	4

There was a considerable similarity of distribution among the various countries of this weighting of importance of economics topics. Of fifteen syllabuses analysed, ten countries showed production as the first priority and a further three showed production as the second priority.

At the bottom end of the scale there was the same kind of similarity between the countries. Of the fifteen syllabuses, nine showed distribution as the lowest priority (tenth) and a further three countries gave distribution the ninth place in importance.

In view of the diversity of social philosophies, there is a surprisingly large area of similarity among the ten topics of economics covered by the syllabus of the Western European countries. We shall discuss later in this chapter how far there exists a common core of economics topics over the countries we have studied. At this stage it is certainly possible to discern the outline of a European orientated economics syllabus which would not be unduly difficult to find acceptable in most, though not all of the countries under consideration.

Is there a best order for teaching economics ?

In order to discover how the various countries rated the importance of very general aspects of economics for teaching purposes, each country was asked to study which aspects of economics received the most detailed treatment. Each country's delegate was then asked to rank the aspects set out below in a descending order of importance, indicating where equality of importance existed, and omitting those aspects which were not dealt with. The general aspects of economics to be placed in order of priority were : 1. Economic theory 2. National economic structure 3. World international structure 4. European economic structure 5. Political economics 6. Social economics

The result of this survey is given below (table 7).

TABLE 7 - Relative order of importance of economics syllabus topics in various European countries

Belgium	1: Political economy	2 = National economic structure	2 = World economic structure	2 = European economic structure	5: Economic theory	6: Social economics
Cyprus	1: Economic theory	2: National economic structure	3: European economic structure	4: Social economics	5: World economic	6: Political economy
France	1 = National economic structure	1 = World economic structure	3 = Economic theory	3 = Social economics		
Fed. Rep. of Germany	1: Economic theory	2: Political economy	3: Social economics	4: National economic structure	5: European economic structure	6: World economic structure
Italy	1: Economic theory	2: Political economy	3: Social economics	4: European economic structure		
Luxembourg	1: Economic theory	2: Social economics				
Malta	1: Economic theory	2: National economic structure	3: Political economy	4: World economic structure	5: Social economics	6: European economic structure
Netherlands	1: Economic theory	2: National economic structure	3: World economic structure	4: European economic structure		
Norway	1: Economic theory	2: Political economy	3: Social economics	4: National economic structure	5: European economic structure	6: World economic structure
Sweden	1: National economic structure	2 = World economic structure	2 = European economic structure	4: Social economics	5 = Political economy	5 = Economic theory
Switzerland	1: Economic theory	2: Political economy	3: Social economics	4: National economic structure	5: World economic structure	6: European economic structure
United Kingdom	1: Economic theory	2: National economic structure	3 = Political economy	3 = Social economics	5 = World economic structure	5 = European economic structure

If we can generalise the results of table 7 over the whole of the countries providing the information we can set out a hypothetical "European" order of priority for teaching the aspects of economics as follows :

1. Economic theory
2. National economic structure
3. Political economics
4. Social economics
5. World international structure
6. European economic structure

Interestingly enough, the United Kingdom falls exactly on this order of priority, while Switzerland, Malta and the Netherlands are very close indeed to it.

It is still a little saddening to find confirmation of the view that study of the European economic structure achieves to date the lowest priority of all. Two countries, France and Luxembourg, surprisingly make no reference to the European economic structure in their list of priorities for teaching economics. Several other countries, Italy, Malta, the Netherlands, Switzerland and the United Kingdom place this area of European studies as their lowest order of priority.

A macro or micro-economic approach

Macro-economics studies the broad general aspects of economics. The state is a macro-economic unit. Macro-economics would consider such topics as total saving, total spending, or the national import and export position. Micro-economics looks at separate aspects of the economic system. The firm is a micro-economic unit.

Within any given syllabus it is possible to teach both a micro, and a macro-economic understanding. In some countries the decision as to the method of approach may be left to the individual teacher provided the syllabus as a whole is properly covered. In Western Europe, however, there is a distinct preference in some countries for studying economics at the upper secondary level either through the micro-economic aspects of the syllabus, or through the micro-economic aspects of the syllabus, or through the macro-economic aspects.

In order to discover how far practice varied in Western Europe, the participating countries were asked to state how they generally dealt with this problem of syllabus exposition and whether there was a significant tendency to stress macro-economics or micro-economics. Table 8 below sets out the result.

TABLE 8 - Syllabus and teaching approach to the distinction between macro and micro-economics

Country	Taught in early part of the course	Taught in late part of the course
Belgium	Micro	Macro
Cyprus	Macro	Macro
France	Macro and some micro	Macro
Fed. Rep. of Germany	Macro	Micro
Italy	Combined macro/micro	Combined macro/micro
Luxembourg	Macro	Macro
Malta	Combined macro/micro	Combined macro/micro
Netherlands	Combined macro/micro	Combined macro/micro
Norway	Micro	Combined macro/micro
Sweden	Micro	Micro
Switzerland	Combined macro/micro	Combined macro/micro
United Kingdom	Macro	Macro

It will be noticed that four of the countries refer to macro-economics only, viz. Cyprus, France (a small amount of micro), Luxembourg and the United Kingdom. Sweden is the sole country to provide a micro-economic approach throughout its syllabus. Four countries, Italy, Malta, the Netherlands and Switzerland, interpret their economic studies through a combined macro/micro approach to teaching. Except where a given syllabus clearly concentrates on micro-economics, there is probably advantage in leaving teachers to determine for themselves the most efficient and convenient method of enabling their pupils to understand economics. Some teachers will probably find that children of high intellectual capacity can grasp quickly the general concepts of macro-economics, and that the detailed study of micro-economics can be fitted within this conceptual framework of knowledge. By contrast, pupils with less academic capability may well find that study can be closer linked with their experience if it begins from the household, the retail store, and the employing unit, i.e. a micro-economic approach, from which the broad general principles of economics may be derived at a later stage.

Descriptive or analytical

A similar, though not identical division of the economics syllabus can be made by considering the two major aspects of descriptive or analytical economics. Descriptive economics begins with the facts and describes how economic units work in daily life. Analytical economics considers the theories,

such as those relating to supply and demand, marginal utility, or savings and investment. Table 9 below shows that most of the countries of Western Europe do divide their syllabus into descriptive and analytic areas, and that all except Switzerland begin their teaching syllabus from descriptive (or combined descriptive and analytical) economics. This is almost certainly good teaching technique when we are considering the introduction of a new (somewhat theoretical) subject to children aged 16 years, and perhaps of average rather than outstanding ability.

TABLE 9 - Syllabus and teaching approach to a division between descriptive and analytical economics

Country	Aspect taught early in the course of study	Aspect taught late in the course of study
Belgium	Descriptive	Combined (i.e. descriptive and analytical)
Cyprus	Descriptive	Combined
France	Combined	Combined
Fed. rep. of Germany	Descriptive	Combined
Italy	Descriptive	Combined
Luxembourg	Descriptive	Analytical
Malta	Combined	Combined
Netherlands	Combined	Combined
Norway	Descriptive	Analytical
Sweden	Descriptive	Combined
Switzerland	Analytical	Analytical
United Kingdom	Descriptive	Analytical

How much study time to cover the syllabus ?

It is always a matter to deep interest to the educationist to compare, and often contrast, the amount of study time usually allowed to different subjects within a school or college programme. It is, for example, a matter of some discontent among teachers of history in the United Kingdom that their subject is usually allocated considerably less time at the lower secondary level (ages 11 - 15 or 11 - 16) than such subjects as mathematics.

At the upper secondary level in the United Kingdom (ages 15 - 18 or 16 - 18) there is a closer proximity to equality in the weekly time allowed for the study of subjects at the Advanced Level of the General Certificate of Education.

In the countries of Western Europe, at the upper secondary level it is fairly common to find that the range of weekly study time allowed to economics is 3 1/2 to 4 1/2 hours. The variation probably relates conveniently to the width and variety of the syllabus.

The duration of the course of study is much more varied mainly because some countries introduce the subject of economics into the school system much earlier than others. In the United Kingdom, it is still relatively unusual to study economics before the age of 16. The typical course duration is thus two years, to cover a syllabus for an examination which is normally taken at the age of 18. This two-year pattern of studies is fairly common in Western Europe.

France and Sweden, however, introduce economics, or economics-related studies, at about the age of 15 and this permits a three-year course to cover the syllabus up to an examination taken at the age of 18 or 19. Luxembourg goes even further, with an economics course covering four years, and Switzerland allows four and a half years for pupils in the economics stream. However, the first part of each of these two long courses, i. e. in Luxembourg and Switzerland, is largely concerned with elementary studies in commerce which lead later to the more academic study of economics.

Revising the syllabus

Many of the delegates to the Council of Europe meeting felt that economics syllabuses in secondary schools were both out-dated and overloaded. It was generally considered that economics was a dynamic and rapidly developing subject, and that therefore syllabuses should be subject to frequent review.

Economics is one of many modern subjects in which new information, new techniques, and new theories add additional sections to overloaded syllabuses. One answer to this problem is to provide extra teaching time each week for the subject, but this solution is self-defeating for it leads only to the same request on behalf of all other subjects.

Unless syllabuses are frequently revised, both to eliminate outdated ideas, and to incorporate new information, then students and pupils may suffer because they will be equipped with inadequate or outmoded techniques. Some countries have a systematic survey every five years, while others may conduct continuous surveillance and revision of syllabus through subject teachers' advisory committees attached to examining bodies.

Is there a common core ?

It is inevitable that a group of economics specialists meeting in a Council of Europe environment, should begin to wonder whether there was a common core of economics knowledge applicable over all the countries concerned.

Equally inevitably, the specialists found that there were very many differences between the economics syllabuses presented. On first sight it appeared that the differences outweighed the similarities, but a closer look at the economic topics and sub-topics now reveals a fairly substantial area of concurrence between the economics syllabuses studied.

If we compare the economics syllabus of Sweden (which has a strongly micro-economic approach), and the syllabus commonly used in France (which places a considerable emphasis on macro-economic studies),then we find a very limited number of sub-topics which appear in both syllabuses.

Yet, if we set out the sub-topics studied by twelve or more of the sixteen countries under consideration, then we find that about half these sub-topics appear in twelve or more of the countries concerned.

If we examine the frequency with which main sub-topics appear in the syllabuses, we have only to exclude Austria (with no academic economics in the secondary school) and Sweden (with a strongly practical approach to economics), to find that it would not be unduly difficult to undertake the preparation of a common syllabus for fourteen Western European countries.

Another way of attempting to discern the presence of a common core of subject matter is set out in table 10 below.

TABLE 10

Major economic topic	Number of country syllabuses available	Number of syllabuses which cover more than 50% of the content of the listed major economic topic
1. History of economics General concepts, scarcity and choice	16	15
2. Production	16	14
3. Macro-economic theory	16	14
4. Money and banking	16	14
5. Theory of price, supply and demand, and markets	16	12
6. National income and its measurement	16	12
7. Economic activity of the state	16	12
8. International economics	16	11
9. Economic organisation	16	11
10. Distribution	16	7

Table 10 also shows that there are considerable areas of similarity between the economics syllabuses of the various countries. It would require much patience, ingenuity, persuasion and forbearance to produce a European syllabus for economics, but these qualities are exhibited in every consequential move made to produce some sort of order into human affairs, and it would appear to be within the powers of well-intentioned educationists to succeed in reaching agreement about a common core of economics studies for the countries of Western Europe.

The group of educationists at the Council of Europe conference felt that, in the context of the conference, the breadth of curriculum needed to meet the requirements of all member countries made the task of selecting a common core of topics impracticable, but that much value might emerge from attempting to show where groups of countries overlapped in their curriculum structures. Where such congruence was observable, teaching and testing material might well benefit from the establishment of item banks (please see chapter 8 for "item banks").

That task of attempting "to show where groups of countries overlapped in their curriculum structures" has been undertaken by the Oxford University/Council of Europe study group. The general conclusions of that survey are those set out in this section of the ascertainment of a common core.

An outline plan or a detailed syllabus

Education in Western Europe has a long tradition of leaving a good deal of freedom in the hands of teachers in interpreting and applying syllabuses to courses of study. The explosion of knowledge which has occured in the twentieth century, has however, brought new pressures to bear on governmental education authorities. These pressures are tending towards a centralised description of syllabuses, if only to ensure that pupils in schools have a reasonably similar content of knowledge when they leave school for work, or proceed from school to higher education. Among the countries of Western Europe there are still wide variations in the degree of centralisation in the supervision of the syllabus used in teaching school subjects.

The United Kingdom is an example of a country in which this tendency towards centralisation has so far made very little impact. The Department of Education and Science leaves to local education authorities the supervision of schools and local colleges, the selection of syllabuses, approach to examinations, and methods of study. This decentralisation can lead to a desirable variety in the education of various schools. Experiment and innovation can be encouraged. Pupils and teachers may find stimulus and intellectual excitement from an opportunity to try out new ideas.

There is, however, another side to decentralisation of syllabus control. Pupils whose teachers prefer well-known paths to new ways may find that their course of study is not well designed to enable them to compete successfully for the limited number of university places. Even innovation can have its limitations, for the introduction of new material into a syllabus must inevitably mean that some sector of the existing syllabus must be neglected, and that sector might easily appear in the examination paper set by an external examining body.

Even new teaching methods may contain hazards for the pupils. Enthusiastic teachers may be ready to try out such methods as group study, project work, visits to appropriate places, and self-motivated learning through access to sources of material. These methods may be very valuable. They may be better educationally than more conventional methods in the sense that they will result in pupils better able to cope with life. The problem lies in the fact that even professional teachers find great difficulty in assessing how much is actually learned by pupils through these less conventional methods of teaching. The real test for the pupils arises at the terminal examination stage, when success or failure in the examination may determine success or failure in obtaining a particular job, or in attaining admission to a particular university.

It is then not surprising that some Western European countries maintain a much closer centralised control over the application of subject syllabuses than does the United Kingdom. In some cases this centralisation has gone a considerable way. Examples occur in the social economics syllabus of Norway, in the business studies syllabuses in Sweden, in the social and political sciences syllabus of France, and in the geographical and economics studies syllabus of Denmark. Cyprus and Turkey have not quite the same level of centralisation as the four countries previously mentioned, but they certainly control syllabuses more than do the education authorities in the United Kingdom.

There is no necessity to assume that centralisation of syllabus structure is necessarily to be deplored. Administration of syllabus application need not be rigid. Teaching method can still be left to the teachers. Some of the centrally issued syllabus schemes give evidence of being based on a good deal of research and professional teaching expertise. The Läroplan of Sweden for example, which is offered to the gymnasium (academic secondary school) contains some valuable study materials in the form of case studies. The plan develops a most desirable integration between economics in the form of business studies, and such associated techniques as marketing, accountancy and personnel management. Methodological innovation is here encouraged by the stimulating presentation of a thoroughly professional syllabus.

There is no simple answer then, to the question about the advantages of centralised or decentralised control over syllabus. We may, however, begin to speculate that decentralisation of syllabus design in the extreme form exhibited by the United Kingdom, may not continue for ever to be to the benefit of the pupils in that country.

Determining the importance of economic topics

Whether the economics syllabus is determined centrally, locally or by the individual school, there should be some conscious decision about the relative importance of the various aspects of the syllabus.

We have already considered some major divisions of an economics syllabus. Those divisions may include the distinction between a macro-economic or a micro-economic approach to the teaching of economics. Similar, but not identical, lines of demarcation can be drawn between descriptive and analytical economics, or between applied and theoretical economics.

Should there be a pre-determined weighting of the syllabus to accord with the educational aims of the teachers ? Or to the aim of the makers of the syllabus ? Should teachers divide teaching time equally between applied economics and theoretical economics? Or should thirty per cent of teaching time be spent on applied and seventy per cent on theoretical ? These questions are not simply academic. They become peremptory in the shape of an examination paper which may itself be an expression of a conscious decision about the relative weights to be allocated to different parts of the syllabus.

An even more detailed weighting may become necessary if economics continues to develop the recent introduction of objective testing as a component part of examination structures (please see chapter VI). Objective testing may require a detailed specification of the syllabus to be examined, combined with a predetermined weighting of each major topic in order to ensure that the proper relative importance of each topic is expressed in the examination items of the objective test.

We set out below (table 11) the way in which one examining body in the United Kingdom has expressed teachers' opinions about the relative weighting to be allocated to selected major economic topics designed to cover the entire syllabus.

TABLE 11 - Relative importance of economic topics

Economic topic	Percentage weight to be applied to each topic
Preliminary ideas	5
Micro-economics	25
Macro-economics	30
International economics	10
Economic organisation	15
Population/location of industry	5
Current topics/miscellaneous	10
Total	100

This weighting of relative importance formed part of the instructions to examiners who were writing examination items for an objective test designed to cover the syllabus. This necessity adds a new dimension of intellectual discipline required of the teacher. For each teacher may now be called upon to consider and state, in quantitative terms, a relative importance to economic topics. A relative importance of the topics may have been implicit in the teacher's mind for many years. Yet, without the necessity for quantitative assessment, teaching may by accident result in under-use of teaching time of some economic topics, and over-use for others. The economy of economics alone should provide some incentive to avoid diseconomies in the teaching of economics.

A curriculum for the future

Economics does not consist of a static body of knowledge to be absorbed and reissued by generation after generation of pupils. Economics is a dynamic subject. Both content and method of economics changes almost year by year. This rapid evolution demands that economics syllabuses are reviewed regularly and are brought up to date.

Yet, even bringing "up to date" is not sufficient, for economics has a predictive area. The subject must aim to foresee new moves in economic organisation, just as it must extrapolate existing trends, e. g. in the population sector in order to plan the best use of scarce resources. Every economics syllabus therefore, ought to aim to develop naturally from past experience, to incorporate current economic events, and to anticipate the future.

Such a syllabus might well have to consider the incorporation of techniques of business analysis which have appeared slowly and rarely in the academic economics syllabus of the past or of the present. Operational research may well require highly trained statisticians, but its application is primarily to economics. At the minimum, the principles and the uses of operational research may have to become part of economics syllabuses - even at the upper secondary school level in the future. Market research has a similar impact on the world of salesmen, the development of new markets and the efficient application of advertising. Sweden only, of those countries we have been considering, appears to have incorporated several of these new techniques into the business economics syllabus.

Managerial techniques may also have to be included as essential methods of improving the tools by which economists make the best use of the world's resources. Discounted cash flow, critical path analysis, and cost/benefit analysis are three such tools of business management which must become standard equipment for the professional economist. It is obvious that not all students of economics will become professional economists. But some, perhaps the best, will do so, and such students must be given some insight into the use of techniques which are not particularly difficult to understand and which may well improve learning through the practical nature of the techniques, and through their manifest application to the realities of daily life.

An international economics syllabus

A serious effort is now being made to introduce an internationally acceptable entrance qualification for admission to higher education.

The International Baccalaureate, introduced on an experimental basis in 1966, reached an operational stage of examining in 1970. The examination is provided primarily for children aged about 18 +, in international schools, and is principally intended as a passport for admission to university education.

The economics syllabuses for the International Baccalauréat were prepared by a group of specialists from several countries. The syllabuses were designed for international application. They provide an example which should enable comparisons to be made with nationally prepared syllabuses. We give below the syllabus for the higher level economics examination, as its standard is comparable with the university entrance examinations, such as the Abitur in the Federal Republic of Germany, the baccalauréat in France, and the General Certificate of Education at Advanced level in the United Kingdom. (There is a subsidiary level of economics in the International Baccalaureate. Its standard lies between the Ordinary level and Advanced level of the General Certificate of Education in the United Kingdom).

TABLE 12 - International Baccalaureate Syllabus

ECONOMICS (Higher Level)
A. The process of creating wealth Population. Factors of production. Productivity. Ownership and organisation of industries. Localisation of industries. Specialisation. Costs. Supply. Regional and international aspects.
B. The process of sharing and exchanging wealth The market : Price formation, demand and supply. Elasticity. Perfect and imperfect markets. Profit, interest, rent, wages. National income. Money and the banking system. Savings and investment. Indices of changing values. International prices and terms of trade. Balance of payments.
C. The utilisation of wealth The national product. Consumption function. Investment. Simple equilibrium conditions.
D. Economic policy Public finance. State economic plans. International economic organisations. Economic development.

SUMMARY OF CONCLUSIONS

The following general conclusions may be drawn from this chapter :

1. We must expect to find social and political philosophies expressed in economics' syllabuses.
2. The history of economics, or of economists is not widely studied in Western Europe. Other major areas of economics all have some fairly widespread support.
3. Table 6 gives a mesure of the relative importance of ten major economic topics. The topic of production was generally accorded highest importance, and the topic of distribution the least importance.
4. There is a fair amount of agreement about the order in which economics topics should be taught. (Table 7).
5. There is little agreement about whether macro-economics or micro-economics should be taught first.
6. Most countries agree on teaching descriptive economics before analytical economics.
7. There is considerable variation between countries about the duration of economics' courses.
8. There appears to be some possibility of discerning a common core of topics within an economics syllabus which might suit countries of Western Europe except Austria and Sweden.
9. The degree of centralised control over economics syllabuses varies widely in Western Europe.
10. It may become necessary for educationists to decide upon the relative importance of various aspects of economics syllabuses.

C H A P T E R I V

ECONOMICS WITHIN AN EDUCATIONAL STRATEGY

The Organisation for Economic Co-operation and Development published in 1966 a study of curriculum improvement and educational development. That study drew attention to the commitment of all OECD members to a high rate of educational expansion, and to the consequential necessity of planning for significant increases in the proportion of national incomes expended for this purpose. But, determination to accept expansion and expenditure is not a sufficient condition for the economic allocation of scarce resources. The money must be spent efficiently and productively. In order to attain these ends the OECD study recommended that a new approach be made to the construction of school programmes. This new approach would incorporate the following principles :

" a) curriculum development must be seen as an integral and continuing part of educational development policies and of educational planning ;

b) a piecemeal approach to the several disciplines within the curriculum is no longer adequate and an overall approach to the problem of curriculum development is needed;

c) in consequence, member countries should regard curriculum development as a continuing function which requires appropriate national permanent mechanisms to deal with it. " (Foreword, OECD Report Curriculum Improvement and Educational Development)

These recommendations underline the necessity to see the teaching and syllabus of every school subject placed within a consciously designed educational strategy. It will be our purpose in this chapter to examine some of the general concepts which will be required in the future in the design of an educational strategy, and to assess the particular place of economics within that strategy.

The individual within society

If we are to consider an educational strategy, that strategy must take into account both the needs of the individual and the needs of society.

It is over easy for educationists to claim that education must aim to develop the potentialities of the individual. Those potentialities must themselves be acceptable and usable by society. Any pupil with a special potentiality towards stealing or cruelty, would be promptly disowned and redirected by responsible teachers. Even specialist skills like painting or sculpture can be accorded a limited priority only within an educational programme, because the ability to gain a reasonable income through painting or sculpture is restricted to a very small number of human beings - usually with quite exceptional talents.

The individual then must be offered opportunities to develop socially acceptable abilities, and even these abilities should bear some relationship to the future earning capacity of the individual. Cultural and aesthetic values must be nurtured and supported to enable human beings to enjoy the best that life has to offer, but it is extraordinarily difficult to enjoy the best that life has to offer for those incapable of earning a living.

What then of society ? Has it claims ? Has society needs ? Perhaps we should first assert the undeniable fact that most societies spend a fairly substantial proportion of total income on education ; that this proportion is, in general, rising annually and that many societies now regard some forms of education e. g. especially aspects of higher education as incorporating a factor of capital investment,

There is no necessary contradiction between an assertion that all young people should be provided with education suited to their needs, and a proposition that society regards the provision of higher education as capital investment in people. All young people will, and certainly should, be provided with compulsory education in their capacity as children. Once those children reach an age designated by society as a working age i.e. older than the upper limit of compulsory school age, then society sees those young people as job-seekers or as entrants to higher, and voluntary forms of education.

The needs of the employer

What do employers need of education ? Inevitably, employers want "good" employees. They need workers of all kinds with skills, or the potential of developing those skills through training. Employers seek knowledge and aptitudes in employees. They expect the skills of literacy. They hope for the skills of numeracy. They sometimes pursue the contradictory aims of appointing employees who have a high capacity for innovation in the job situation, but a low capacity for innovation in employer/employee relations.

The school as a medium of social interpretation

These needs of the individual, of society, and of the future employer all form part of the input of ideas to the school. In addition, the school must pay attention to the wishes of the parents, and often also to the aims of some external agency of social philosophy such as a religious body which may have a direct relationship with the school.

The school must interpret all these needs in formulating its educational strategy. The school is a social system which uses pedagogy to attain its educational strategy when that strategy has been formulated. Pedagogy operates through a curriculum which is built around subjects. The topics within those subjects are formed into syllabuses so that teachers may be offered a specification upon which to base their teaching.

Syllabuses and curricula then are the written expressions of a whole complex of philosophical aims. These philosophical aims are frequently behind the times because, once syllabuses are formed and curricula designed, they then attain a magic existence of their own. Their very existence inhibits change, yet an entire curriculum may need to be re-designed every ten years to meet the changing philosophies of the various sources from which the pressures of opinion or precept reach the school.

The curriculum is the key to a gateway into educational change. If the strategy of education changes the concept of the school, the output of education will change little if the curriculum, the syllabus, and often the attitudes of the teacher remain the same.

Should we ask whether secondary education, even now in many countries of Western Europe, is not tied too closely to a concept of academic literacy ? Literacy is important, but it is not the only medium through which a living is earned or a life is lived. Academic literacy has formed a strong background to the educational philosophy of secondary education mainly because, until the mid- twentieth century, it was assumed that secondary education was designed for intellectually gifted children. The secondary school, especially as in the United Kingdom, changed its entire character after the second world war when all children were, for the first time, provided with secondary education. All countries of Western Europe are now moving towards the stage when virtually all children who wish to do so will stay in secondary education to the age of 18. This development inevitably requires a re-structuring of the entire educational programme of the secondary school. Acade-

mic literacy cannot expect in the future nearly so high a proportion of educational time that it has been given in the past. Secondary school study of all kinds may have to be geared towards a less academic approach to all subjects - not least the subject of economics. The average secondary school pupil aged 17 + of even ten years ago is not the same average pupil today, and will be as different again from the average pupil aged 17 + in ten years time.

The school as a cultural transmitter

In addition to the influences affecting the school set out above, it is essential to add the school's function in education in transmitting a cultural heritage from one generation to the next. This cultural heritage is expressed through the teachers, who supplement and complement the teaching function of parents, or the parent substitutes of any extended family.

The cultural heritage may be transmitted in the primary school through a personal and group-based relationship between the teacher and the pupil. Modern organisation of a primary school tends to avoid subject-based teaching. But the educational programme of a secondary school becomes more specialised and the teaching is subject orientated. This means that the transmission of cultural heritage can be accomplished only if that cultural heritage is built into subjects, i.e. at secondary school level the curriculum must incorporate factors for the school's function of transmitting a cultural inheritance.

Effect of changes in school organisation

A pronounced feature of the educational scene since the mid-twentieth century has been the move away from selection by ability, accompanied by a trend against early specialisation. These two changes have involved the introduction of new subjects, such as economics, to a wider ability range and a longer age-range. This, in turn, has necessitated the integration of economics as a subject with commercial education, with civics, with social studies, and even with such subjects as geography and sociology. In short, at the lower end of the secondary school (say, ages 11 to 15 years) changes in school organisation have necessitated a multi-disciplinary approach to a curriculum which incorporates an aspect of economics.

The structure of teaching a subject like economics, may also derive from the structure of the school system. If schools are divided into different types such as trade schools, or technical schools together with grammar schools, then both the content and the method of teaching economics may vary from school to school within the same country. The gymnasium or lycée type of schools tends to teach an academic form of economics. Such economics might be associated with political economy, or social sciences or with political sciences. The teaching approach in such school is likely to commence through macro-economics and a study of a national economy.

By contrast, the Handelsakademie as in Austria, or the separate business studies schools as in Switzerland, the vocational schools in some Länder in the Federal Republic of Germany, and in Sweden all teach a practically based economics, studied through micro-economics and related to such subjects as shorthand and typewriting, bookkeeping, or office practice.

A classification (taxonomical) approach to the curriculum

The many different influences upon curriculum planning lead us to question whether such planning should be based upon a classification of the educational skills which are demanded by those influences.

Let us re-consider Bloom's taxonomy of educational skills, in order to discover how they are expressed, or implied in the educational strategy which is the progenitor of a curriculum. Bloom's tax-

onomy has already been given in general categories as follows : Knowledge - Comprehension - Application - Analysis - Synthesis - Evaluation.

(a more detailed explanation of these terms is given in Chapter II table 4, page 29).

In its simplified form, knowledge means a body of facts. These facts can be acquired as part of the learning process in any school subject. The facts should be both relevant to the subject and relevant to the future needs of the pupil.

Comprehension and application can equally be applied to almost any subject. It is a matter of teaching method to ensure that the body of facts is comprehended, i.e. understood, and that these facts can be used in appropriate situations, i.e. applied.

It is when we come to discuss the higher mental faculties of analysis, synthesis and evaluation that we are forced to the conclusion that some subjects of a curriculum would stimulate and exercise these faculties while other subjects would not. We cannot expect the subject of elementary arithmetic to inculcate practice in analysis, synthesis or evaluation. It is difficult to find such qualities in the study (at other than advanced levels) of a dead language. Even the linguistic aspects of a living language may not easily evoke synthesis and evaluation, though they may perhaps require analysis.

The curriculum then should include among its aims a thoroughly discussed and generally agreed series of subjects which can be expected to develop a whole range of mental qualities. Mathematics at its higher levels in schools may well require analysis and synthesis, though perhaps Mathematics is less likely to demand evaluation. The study of literature could well demand all six of the qualities we have postulated as desirable. Economics, could similarly be taught so that the subject stimulated the acquisition and utilisation not only of knowledge, comprehension and application, but also of analysis, synthesis and evaluation.

Some approaches to curriculum building

With the Bloom taxonomy in mind, it may prove fruitful to compare the approaches of some of the Western European countries to the building of a curriculum which includes economics.

In France the teaching of economics is combined with social science, and for both these subjects, emphasis is placed on intellectual rather than moral training. The aim of the course is for the pupil to acquire, firstly, the appropriate skills, secondly, understanding of the subject in its broadest implications, and, ultimately, permanent intellectual habits.

By contrast no specialised economics is taught at all in Denmark. The course in general civics includes some economics. The aim of their courses is to give the pupils a knowledge and an understanding of the structure and working of the Danish community and the Danish state, and of the international relations of the community and the state.

In the Baden Würtemberg Land of the Federal Republic of Germany the course in economics combines instruction in national economy, business studies and accounting. Emphasis is placed on the acquisition of knowledge about economics and on intellectual and moral training. The City of Hamburg expects its pupils to acquire an insight into the economic and social roots of the modern world and into the structure of society, and this is expected to enable the pupil to make decisions, to form opinions and to take his place as a responsible member of society.

The Netherlands closely integrates economics with study of the law. Instruction is expected to

emphasise economic ideas, and should give insight into the connection between economic phenomena and the regulation of law in the life of the community.

Specialised economics in Austria does not appear as a separate subject in the academic or grammar-type secondary school. A separate type of school, the Handelsakademie, prepares the student for higher education in the economic and social fields. If economics appears at all in the academic secondary school, the subject is combined with instruction in geography. The course in the Handelsakademie is vocationally orientated and places emphasis on the acquisition of business techniques and the understanding of practical economics. The principal aim of the Handelsakademie is to give an advanced training in all branches of commerce combined with a broad general education.

For our last two examples we may contrast the approaches of Sweden and the United Kingdom.

The United Kingdom sets out to inculcate three major categories of intellectual skills from the teaching of economics. The first of these skills is to learn the language of economics, i.e. the ability to draw diagrams, to use data, and to understand terminology. The second skill to be acquired is that of analysis, i.e. the pupil is to have practice in the collection, selection and ordering of material. The pupil is also expected to learn how to use elementary principles of economic reasoning in the analysis of economic-institutions and national economic policy. The third category of educational skills is that of application. The pupil must learn to apply theoretical concepts to the solution of economic questions.

Sweden has a very practical approach to its course in Business Economy. The course is practically orientated and attempts to provide the pupil with a good working knowledge of the structure, resources and functions of business enterprise. Instruction is to start with the use of concrete examples, and should lead to an understanding of abstract principles. Throughout the course, however, more stress is laid on practical than theoretical knowledge. Particular emphasis is laid on the acquisition of such techniques as the balancing and reading of accounts, on the ability to understand the cost and price structure of the enterprise, and on the bases of taxation. In addition to learning accounting techniques the pupil should learn to understand and evaluate economic phenomena and to distinguish between fact and opinion.

(All these selected extracts are taken from the Oxford/Council of Europe study group paper prepared for the Council of Europe conference on the aims of teaching economics, Strasbourg 8 December 1969).

It is obvious that these selections of different approaches to the building of a curriculum reflect varying social and educational philosophies.

Range of subjects studied in association with economics

In order to discover more concretely the range of subjects studied in association with economics, we set out below table 13.

TABLE 13 - Range of subjects covered in final two years of secondary education by pupils following specialist courses in economics

Art	A	B	CY	DK	F	D	I	L	M	N	S	CH	GB
Biology				(x)									
Business Studies	x			x									
Chemistry						x			x		x	x	
Classics	x					x							
Civics	x		x	x									
Economics				x							x		
General science	x	x	x		x		x	x	x	x		x	x
Geography		x		x						x			
History	x		x	x	x	x	x			x		x	(x)
History of Art	x	x	x	x	x	x	x	x		x		x	(x)
Mathematics						x							
Modern Languages	x	x	x	x	x	x	x	x		x	x	x	(x)
Mother tongue	x	x	x	x	x	x	x	x		x	x	x	(x)
Philosophy	x	x	x	x	x	x	x	x		x	x	x	(x)
Physics	x					x		x		x		x	
Psychology	x		x			x						x	
Religion										x			
Social Studies	x	x	x	x			x			x		x	

(x) denotes optional subjects.

The most noticeable feature of this table lies in the fact that almost all countries include with economics a study of mathematics, a modern language and the mother tongue. The exceptions are the United Kingdom, (where the subjects are optional, i.e. may be avoided) and Malta (where the course in economics is primarily related to business studies and its topics).

The subject of history is the next subject most frequently associated with economics. History is closely followed by geography.

These associations of economics with a range of commonly accepted associated subjects, point very clearly to the difference between the educational strategy at upper secondary level in the United Kingdom, where the pattern of education at the upper secondary level is to study two or three subjects (which may include economics) to considerable depth. The two or three specialised subject studies may be supported by optional contrasting studies, sometimes designated as "liberal" studies.

By contrast, the typical pupil at upper secondary level in all other countries of Western Europe (except Malta) must study six, seven or eight subjects of which economics may be one if the pupil chooses, or if he is advised to choose an appropriate line of school study.

Perhaps the most unexpected aspect of table 13 to the English educationist is to find philosophy as a subject at the secondary level of education. Austria, the Federal Republic of Germany, Luxem bourg, Norway and Switzerland all include philosophy as a subject at this level. Within the United Kingdom philosophy is regarded as a subject suitable only at the tertiary level of education.

Relationship of study time spent on Economics to other disciplines

The frequency with which economics is associated in table 13 with mathematics, modern languages and the mother tongue, prompts the question whether economics is given the same allocation of teaching time as those major general subjects. We therefore set out below (table 14) an estimate of the amount of time allowed for the teaching of the subjects over the last two years of upper secondary school study.

TABLE 14 - Time spent of studying mathematics, mother tongue and modern languages compared with time spent on economics or business studies

(The figure given represents the total number of hours for the last 2 years of the academic secondary course). Figures placed within brackets indicate that the subjects are optional

	A	B	CY	DK	F	D	I	L	M	N	S	CH	GB
Economics or Business Studies	160	280	70		260	400	260	240	450	560	665	360	500
Civics or Social Studies				350									
Mathematics	200	170	300	240	290	210	140	250	(500)	130	0 - 244	320	(500)
Modern Languages	80-240	560	325	600	390	420	210	420	(500)	550	244-546	480-640	(500)
Mother Tongue	240	280	300	260	260	240	210	210	(500)	235	273	32	(500)

Table 14 reinforces the information that there is considerable variation in the amount of teaching time provided for the teaching of economics in the countries listed. It is equally true, however, that there are wide variations in the amount of teaching time provided for mathematics, and modern languages. The teaching of the mother tongue however seems to be provided with much the same amount of teaching time in all countries except the United Kingdom and Malta. The explanation is that both Malta and the United Kingdom provide for a highly specialisted study of three subjects only at the upper secondary level. This same principle explains why the United Kingdom provides almost the largest amount of teaching time for economics (500 hours).

There are some further differences in the amounts of teaching time provided by the different countries for the teaching of Economics. Sweden shows a total of 665 hours (over two years) for economics, but this high figure is provided to cover also several subjects which are incorporated within the Swedish subject of Business Economics. The very low number of hours shown by Cyprus is partially a consequence of the extreme necessity on that island for the secondary school pupils to study several modern languages.

Related subjects included in the Economics course

These two vastly different approaches of Sweden and Cyprus to the description of an economics course are examples of the difficulty which arises in trying to compare courses in economics in different countries. It is much easier for example, to compare like with like when discussing the relationships between different countries to the study of a modern foreign language, or to mathematics. Economics is still in many countries intermingled with a course in Business Studies, or commercial practice.

We give below (table 15) the related subjects included in the economics course for the countries listed.

TABLE 15 - Related subjects included in the economics course

Subject	B	CY	F	D	I	L	M	N	S	CH
Accounting	x	x		x	x	x	x	x	x	x
Book keeping					x					
Commercial studies	x	x		x	x		x	x	x	x
Commercial correspondence		x								
Commercial mathematics		x				x				
Law		x		x	x	x		x	x	x
Political studies				x	x				(x)	x
Social studies	x	x	x	x	x				(x)	x
Skills : Shorthand	(x)	(x)		x					(x)	
Typing	(x)	x		x				x	(x)	x

It will be seen from table 15 that such office skills as shorthand and typewriting are associated with the economics course in Belgium, Cyprus, the Federal Republic of Germany (some Länder only), Norway, Sweden and Switzerland. Accounting is incorporated into the course structure in all listed countries except France, and Commercial studies are attached in all countries listed except France and Luxembourg.

Relationship of Economics to Business Studies

In order to understand the differences set out above, between the various subjects incorporated with economics courses, we must clearly differentiate (as we did in chapter II) between academic economics, and the study of commerce. Commerce is the study of the facts and the practical applications of economics. Economics utilises the facts in order to formulate theories and hypotheses about the way the economic system works.

There is inevitably some overlap between commerce and economics especially in the areas of advanced commerce, which borders upon theoretical studies, and in the area of elementary economics which may begin from a study of the facts of commerce.

At the lower secondary level (ages 11 - 15 or 16) it would be common to find commerce (possibly named "business economics") studies in common with several related topics such as commercial practice, or book-keeping and especially for girls, with the office skills of shorthand and typewriting. This type of course may extend into the upper secondary level (ages 15 or 16 to 18 or 19) for the less academically inclined pupils.

At the upper secondary level, however it is more common to find an academic economics course studied to the appropriate level for acceptance as a qualification for admission to university education.

Nevertheless, the subject, or course, of Business Studies is gaining ground as a basis of academic study. For example in the United Kingdom, despite its strong academic tradition of study at the upper secondary level, the University of Cambridge Local Examinations Syndicate began in 1969 to examine at university entrance level the subject of Business Studies. The course of study is designed to serve as an introduction to the principles governing business decisions. The syllabus involves the study of four lines of approach to the analysis of business problems. These are :

- accounting and finance
- use and interpretation of quantitative data
- study of human behaviour
- study of the economic environment in which a business concern is conducted.

The course for this subject was offered in 26 schools during 1971. Each course is provided with about 400 hours of teaching time spread over two years.

It will not have escaped the notice of the observant reader that this course in Business Studies bears considerable similarity to the Business Economics course offered in Sweden to the academic line of the upper secondary school.

A much more extensive development of business studies is taking place within the United Kingdom. This development is outside the school system but inside the upper secondary age range. The courses of study are available in nearly two hundred colleges of further education and, at the level to which we refer, apply mainly to young people aged 16 to 18.

The qualification offered for this course is the Ordinary National Diploma in Business Studies. The course covers two years of full time study. Students must study at least five subjects which usually include accountancy, law, economics, and English. A wide range of additional optional subjects is available. Those optional subjects include economic geography, economic history, modern foreign languages, cost accountancy, insurance and statistical method.

A good pass (i.e. five subjects achieving 50 % of possible marks) qualifies for application for admission to many university courses, or to a Higher National Diploma in Business Studies.

It is distinctly possible that an integration of economics with other aspects of business studies would provide a more attractive and comprehensible grasp of economic studies than the traditional academic approach. Teaching can be related attractively to decision making, to human relations problems in industry, to the use of numerical techniques and to career prospects. For these reasons we may well find that, at the secondary level the teaching of economics may become more business orientated in the future - leaving academic economics to the tertiary level of education.

At what stage or age should the study of economics begin ?

The possible future re-alignment of secondary education level economics with business studies, combines with the wider ability range we can expect to stay on in secondary education to invite discussion upon an appropriate age or stage in education at which to begin a study of economics.

We have already indicated that the study of economics begins at several different ages within the countries of Western Europe. Some educationists in the United States of America are now suggesting that the study of economics should begin as soon as the primary school stage is completed, i.e. at the age of 11, 12 or 13. The course of commercial studies in Switzerland already runs for four and a half years, which presumably means that children must begin the study of commerce/economics at the age of 13 or 14 years.

In the United Kingdom it is relatively unusual to begin the study of academic economics before the age of 16. However there are aspects of economics or commerce in the courses for the Certificate of Secondary education, which implies that children begin this study at the age of 14 or 15 years.

The evidence then appears to indicate that after moving downwards from university level to upper secondary education level, economics as a subject of study is steadily moving onwards to the lower secondary level of education. If the practical and factual aspects of commerce are to be the basis of teaching economics at the lower secondary level (rather than the conceptual or theoretical aspects of economics) then there seems no logical reason to exclude commerce from the lower secondary level of study. Commerce is certainly no more conceptual than history at lower secondary level, and may have much more practical attraction for children.

Should economics become a compulsory subject at secondary school level ?

From a consideration of the theoretical suitability of studies of commerce throughout the secondary level of education, we can go on to ask the somewhat provocative question, should economics become a compulsory subject at secondary school level ? The question is provocative because it invites the riposte from teachers of every specialist subject that each specialist subject should be compulsory in secondary school education. If commerce/cum economics comes in to the curriculum, what is to go out ?

Nevertheless, there is some case for considering a study of elementary economics or commerce

as a necessary component in the education we provide for our children. Economics combines a great deal of practical experience with much theoretical abstraction. Economics is a cross-disciplinary subject, for it incorporates both an "arts" and a "science" aspect. The presentation of economics may be literary or numerate. Even more important, economics lays stress upon the interdependence of mankind, as much as it does upon the mutual advantage of exchange between two people. Despite the air of competition within the philosophy of economics, there is also an urge towards socialisation because mutual benefit arises from the maximisation of production.

Conclusion

The place of economics within an educational strategy is mobile; both because economics is changing and because educational strategies are changing. Educational strategies are changing in a direction likely to give more prominence to the study of commerce and economics in the secondary school of the future. Economics is changing in such a way that the kind of economics to be taught in the secondary school in future may have a closer affinity to business studies, than to academic economics.

C H A P T E R V

SECONDARY TERMINAL OR UNIVERSITY ENTRANCE ?

Economics is not alone as a secondary school examination subject in its ambivalent position between :

a) assessing pupils' achievements at the end of a course of secondary education, and
b) qualifying candidates for admission to tertiary education.

The initial objective of the joint Oxford/Council of Europe project for the evaluation of curricula and examinations,was to determine the minimum level of knowledge necessary for entrance to European universities. This project involved :

a) an analysis of curricula and examinations ;
b) the determination of common denominators for a possible European examination ; and
c) the establishment of a prototype experimental European examination, which would permit the eventual application of common requirements for university entrance in Europe.

These aims are proper to an organisation like the Council of Europe which seeks to foresee the future European educational structure, and to provide for the seemingly inevitable mobility of pupils and students. Yet, the aims involve a tremendous effort of faith, for they assume that the problems which are inherent in secondary education examination structures throughout Europe are soluble.

These problems can be reduced in this chapter to one major proposition. Is it possible to retain the existing examination structure both to assess achievement at the end of a secondary education course, and, by the same examination to qualify candidates for admission to university ? We shall aim to throw some light on that proposition in this chapter, though we cannot hope to offer any easy solutions.

The duality of aim in secondary education

The dual but changing aims of the German Abitur, the French Baccalauréat and the United Kingdom General Certificate of Education (Advanced Level) are well known, so we take a lesser known example of a country (Luxembourg) where duality of aim is changing.

Until 1968 in Luxembourg, the commercial sections of the Lycée prepared pupils for both university study and for middle grade occupations. But Article 44 of the Law of 10 May 1968 changed this dual aim for it stated that secondary education should give the pupils a sound general education and should prepare them for higher studies. This change meant that secondary education should be viewed principally as a preparation for higher education and, as a result, the educational system would no longer be geared to professional requirements.

Here we have a frank admission that, until the 1968 changes, the requirements of professional occupations were profoundly influencing the content and subject matter of secondary education. Luxembourg has removed the influence of professional bodies from her secondary education system, only to find that there still remains a dual aim. The pupils are expected to acquire a "sound general education", i.e. we must assume in preparation for a future work career, and at the same time the course is to prepare the pupils for higher studies. It may be that thse dual aims can be made compatible at present. It seems very unlikely however that the two aims will remain compatible in a future, expanded secondary education system.

The delegates to the Council of Europe conference on the teaching of economics found this duality of aim particularly distracting when they were considering the applicability of Bloom's classification of educational skills to the teaching of economics.

The delegates agreed that the difficulty arose because, in some countries, the teaching of economics had two distinct purposes. These were

i) to provide pupils with occupational training, equiping them for immediate entry into working life ; and

ii) to provide some pupils with general education giving them a broad understanding of economics and to prepare them adequately for taking up economic studies at university level.

A country by country analysis of aims

In order to discover how far it is possible to generalise about the dual aims (i.e. for careers or for higher education) of providing economics courses we set out below the declared aims of the listed countries.

TABLE 16 - Aims of the course in specialist economics

Aims of course	B	CY	F	D	I	L	M	NL	N	S	CH	GB
Preparation for university	x	x	x			x		x			x	x
Preparation for other forms of higher education	x	x	x									x
Preparation for other forms of post-secondary education		x	x									x
Vocational training e.g. accountancy, banking etc.		x					x					
Combined vocational and academic training	x	x		x	x				x	x		

It will be seen from table 16 that seven (Belgium, Cyprus, France, Luxembourg, the Netherlands, Switzerland and the United Kingdom) of the twelve countries listed prepare pupils of economics primarily for university, or other forms of higher education. One country only (Malta), states the aim of preparing economics pupils for vocational training, although Cyprus accepts that aim as one of five aims for economics pupils. Seven countries, Belgium, Cyprus, the Federal Republic of Germany, Italy Norway and Sweden set out to combine vocational and academic training in economics courses.

This variation of aim is, in some cases, embraced within the same school structure ; as, for example is the case in the United Kingdom. In other countries, such as Italy, or some Länder of the Federal Republic of Germany, there are separate school systems ; one for the more vocationally orientated economics courses, and another for the academic economics courses. This school organisational division creates a further level of complexity when we try to discover the level of compati-

bility between the two aims of providing a secondary terminal courses of study, and , at the same time of offering a passport for entry into university studies. The problem arises because the universities are enabled to determine their own standards of admission. Some universities in the Federal Republic of Germany and in Switzerland appear to be less ready to accept students coming from the economics schools (Wirtschaftsoberschule) than they are to accept similarity qualified students from the traditional academic secondary school (Gymnasium).

The academic tradition and the secondary school

Secondary education in Western Europe was provided by governments up to the second world war, mainly for children of the higher intellectual ability ranges. In the United Kingdom until 1945 there was a clear division between elementary education, provided for all children of compulsory school age (ages 5 - 14), and secondary education which was provided for the selcted few (between 15 % and 20 % of the age range) over the age range of 11 to 16 years. A yet smaller percentage of children stayed on in secondary education to the age of 18.

The children selected for secondary education at the age of 10 to 11 years were selected because of their mental faculties, and the courses offered were academic as a consequence. The most gifted children stayed at school until the age of 18 and competed for a very limited number of places in universities.

Hence, in the United Kingdom the entire secondary school system, prior to the 1944 Education/Act was orientated towards enabling the cleverest children to enter university.

The situation over most of Western Europe was not dissimilar to that of the United Kingdom, up to the outbreak of the second world war (1939).

Even before the end of the second world war many Western European countries were planning a post war extension of educational opportunity. In the United Kingdom, the 1944 Education Act abolished the former distinction between elementary education and secondary education. In future, all children would attend primary school from the ages of 5 to about 11, and secondary school from 11 to 15. There still remained a triple division of secondary education. The secondary grammar schools were to provide for the academically inclined, secondary technical schools were to provide for the technically interested. The remaining children were to attend secondary modern schools.

The major purpose of the comprehensive school movement in the United Kingdom was to bring together these three streams of secondary education, i.e. grammar, technical and modern into one school, the comprehensive school.

The comprehensive school is required to provide for a very wide variety of educational aims, because the school covers the entire ability range of children who are capable of normal secondary education.

Our particular concern here is with the children who stay at the comprehensive (or any other type of secondary) school beyond the school leaving age. In the United Kingdom that school leaving age is 15 in 1971 and is intended to rise to 16 in 1972.

The children who stay on in secondary education until the age of 18 are, at present mainly foolowing an academic programme of study designed to enable the institutes of higher education to accept all suitably qualified applicants, therefore, many children leave secondary school at the age of 18 to enter the world of work.

The examination structure

This brief outline of United Kingdom educational change over the past quarter-century carries considerable similarities to the pattern of educational change in many Western European countries.

Most Western European countries now provide a terminal secondary examination which was principally designed to enable successful candidates to enter higher education. The German Abitur, the French Baccalauréat, and the United Kingdom General Certificate of Education at Advanced Level all fall into this category. It is equally true that all three of those examinations have profoundly influenced the entire curriculum of secondary education towards academic study in the countries concerned.

The expansion of secondary education

The problem of utilising the same examination structure for secondary terminal purposes and university entrance qualifications in 1970 are serious. By 1980 the problems may become insupportable.

The new situation which has arisen is caused by the vast extension of secondary education especially at the upper secondary level, (ages 15 or 16 to 18 or 19).

An expansion of secondary education at the lower secondary level (ages 10 or 11 to 15 or 16) is a consequence of demographic changes which have produced, are producing and will go on producing more children in the secondary school age ranges. Broadly speaking, over Western Europe, the lower secondary level of education is incorporated within the span of compulsory education. Hence, more children within each age range must mean more children to educate at secondary level.

At the upper secondary level, however, there are two causes of expanded numbers. One cause is the obvious demographic consequence of the fact that, if there are more children born in each year then there will be more (after the appropriate interval of years from birth) at each subsequent age. There will certainly be, in many countries of Western Europe, for at least ten years, more children aged 15 or 16 to 18 than there has been in the recent past. After ten years the demographic effect may diminish in such countries as Austria, Denmark, the United Kingdom and Sweden. This demographic cause of expanded numbers at the upper secondary level is re-inforced and even multiplied by a rapidly growing extension of the desire of pupils to remain at school to the age of 18. This pupils' wish is supported by, and encouraged by parental efforts to keep their children longer at school.

The demographic pressure allied to the social demand pressure to keep children at school longer and longer is underwritten by the fact that real incomes are rising in Western Europe. Thus, parents have greater economic opportunity to support their children in longer full time (voluntary) education. Even the parental economic capability is underpinned by a governmental decision in most Western European countries to allow tax concessions to parents maintaining children in full-time education after the compulsory school age has been reached.

Let us see how this expansion of numbers at the upper secondary level has become evident in the study of economics in the United Kingdom (table 17).

TABLE 17 - Number of candidates for the general certificate of education at advanced level

	1955	1961	1969
All subject entries	200,000	244,000	410,000
Economics	2,000	6,000	23,000

(rounded figures to nearest thousand)

Although the expansion in the study of economics has not been as great in countries of Western Europe other than the United Kingdom, there has still been a substantial expansion. The increase in candidate entries implied by the figures given for all subjects has mainly been equalled or exceeded, in general, in Western Europe. In France for example the number of successful candidates for the Baccalauréat rose from about 60,000 in 1960, to about 140,000 in 1970.

A report of the Organisation for Economic Co-operation and Development in 1967 (Expansion in Secondary Education : Trends and Implications. p. 11) indicated that over the ten year period 1955 to 1965 enrolments in secondary schools doubled or nearly doubled in Canada, France, Portugal, Turkey and Yugoslavia ; nearly doubled in Italy and Spain, increased by about 50 % in Belgium, Greece, the Netherlands, England and Wales, and the United States of America ; and increased between 25 % and 35 % in Denmark, Japan and Sweden. The same report (p. 11) suggested that the growth potential of secondary education in the European O. E. C. D. countries is, in spite of doubled or trebled numbers of pupils over the past 10 - 15 years, still very great.

A different O. E. C. D. report (p. 40, Curriculum Improvement and Educational Development) published in 1966 went so far as to suggest that by the year 2000, in the O. E. C. D. area virtually the entire population between 4 and 20 years of age in most countries would be in full-time education.

We need not pursue the trends of expansion quite so far, but we have only to glance at the educational scene in the United States of America to be able to foresee the strong likelihood that the vast majority of young people will, within a generation remain in full-time education to the age of 18.

The new secondary school

The secondary school of the future in Western Europe (and possibly in all highly developed countries) is very likely therefore to cover the entire ability range. This ability range will apply not only to the lower secondary level with its link to compulsory school age, but also to the upper secondary level at which continued full-time education is voluntary.

Hence the entire composition of the school at upper secondary level is likely to change. Instead of recruiting children selected for their academic capabilities, the new secondary school will recruit children from all socio-economic groups, all occupations. These pupils will have widely disparate aims, aspirations, abilities and interests.

Testing achievement in the new secondary school

These wide ranging abilities and interests in the future upper secondary level of education must be measured. Achievements must be assessed for the sake of employers, parents, and the pupils themselves, as well as for the institutes of higher education.

Can we possibly employ the current methods of testing achievement at the upper secondary level in this new type of school ? Or must we accept that the academic type examination has become irrelevant ?

The Abitur examination in the various Länder of the Federal Republic of Germany is typically an examination taken at the end of a course at an academic secondary school (the Gymnasium). Grades are awarded on a six-point scale for course work. There is a written examination, also graded, and there is the possibility of an oral examination often used to assess marginal cases near the failure mark.

On the scale of six points for the Abitur examination grades 1 to 4 achieve a "pass" mark. Candidates receiving a mark of 5 or 6 have "failed".

If this grading of six divisions of the candidates is provided to cover (say) the top twenty per cent of the ability range, it is obvious that the same six grades cannot possibly also cover the remaining eighty per cent of the ability range. Alternatively, it could be argued that if six grades cover the top twenty per cent of the ability range, then a comparable examination to cover the entire ability range would need a thirty point scale (6 points x 5).

By contrast to the German mark scale, the French Baccalauréat has a mark scale of twenty points. For written examinations candidates are required to achieve an average of 12 points or more on each of five major subjects in order to be awarded a pass and the Baccalauréat certificate. For oral examination the minimum average mark now required for a pass is ten out of twenty possible marks.

Marks are aggregated to form four grades of pass

très bien	(average of 16 and over)
bien	(average of 14 or 15)
assez bien	(average of 12 or 13)
passable	(average of 10 or 11)

An average mark below 10 implies failure and is termed

échec	(average below 10)

A further comparison may be made with the grading system used in the United Kingdom for subjects examined at the Advanced Level of the General Certificate of Education. This grading system is as follows

A = excellent
B = very good pass
C = good pass
D = pass
E = bare pass

O = failed at Advanced Level but awarded an Ordinary level pass
F = failed.

i.e. this system is effectively a seven point scale of which the top five scales confer pass, while the bottom two scales indicate failure at the Advanced level. The Schools Council for England and Wales has under consideration in 1971 the replacement of the seven point scale by a twenty point scale.

Finally a comparison may be drawn with the marking system of the International Baccalaureate (also designed to test qualification for admission to higher education). The International Baccalaureate uses a seven point scale for marking as follows

1 = very poor
2 = poor
3 = mediocre
4 = satisfactory
5 = good
6 = very good
7 = excellent

In order to gain the Diploma of the International Baccalaureate a candidate must have been awarded a mark of at least 4 in each of the six subjects examined.

These widely differing methods of marking examinations underline the difficulty which will occur in each Western European country as the ability range widens in upper secondary education. It should be emphasised that, at present the children remaining at secondary school until the age of 18 represent a proportion only of the children following an academic course of study. In the United Kingdom approximately twenty per cent of the age group are following academic secondary education, but in 1968 only a little over half of those remained at school until the age of 18.

Hence we must assume that the grading system applied in the United Kingdom to candidates taking the terminal secondary examination in 1968 covered little more than 10 % of the age group. A twenty point marking system covering ten per cent of the ability range (i.e. if all children stayed at school until the age of 18) would require a two hundred point scale (10 x 20) in order adequately to cover the entire ability range.

It is only necessary to place the current examination systems in this (admittedly somewhat exaggerated) context to place in grave doubt the possiblity of retaining existing examination structures both to cover the ability range of the projected new secondary school, and in the same examination structure to qualify appropriate candidates for admission to higher education.

Social prestige of the examination

A simple method of evading the difficulties postulated above, would be to devise a new examination structure for the upper secondary school-leaver and retain the existing examinations (Baccalauréat, Abitur, General Certificate of Education at Advanced level) in order to select the best candidates for admission to higher education.

Unfortunately, it appears unlikely that society's views, as expressed by parents and pupils would happily accept this simple solution. The prestige of the Baccalauréat in France, and of the Abitur in Germany is such that the strongest possible pressure can be expected if attempts are made by education authorities to restrict entry to these examinations. Already in France, the United Kingdom, and the Federal Republic of Germany there are very large numbers of inadequate candidates entering for the examinations qualifying for admission to higher education. It is socially impossible to avoid the complaint that secondary school pupils would be divided into first-class and second-class

citizens, if a limited and selected few were admitted to the examination qualifying for admission to higher education.

Outlook for existing dual-purpose examinations

If the assumption of the previous section is correct, then we must expect that the existing examinations testing achievement at the end of a secondary school course, and also qualifying for admission to higher education will change their character over the next two decades. The possibility appears that the Abitur, the Baccalauréat, and the General Certificate of Education may have to become in future the secondary terminal examination only. Such a change would require far wider terms of reference for the examinations, together with an extensive range of marking systems.

If however, these existing examinations were to lose their function of also qualifying for admission to higher education, it would be possible to make both certification and course far more suited to the wide ability range of the future upper secondary level of education.

Entry to higher education

There are three major ways for a government to plan for the availability of higher education. These are :

1. the social demand approach
2. the rate of return approach
3. the manpower approach.

The social demand approach implies that society will provide places in full-time higher education for all those with the minimum qualifications for admission. To some extent this is the approach in France and the Federal Republic of Germany.

The rate of return approach assumes that education is a form of investment in human capital, and that higher education in particular would improve the quality of labour resources and therefore contribute to economic growth. A limited weighting is accorded to this principle in most countries of Western Europe, but any educational expenditure undertaken as a consequence of this principle would probably have to be applied selectively to particular subject studies.

The manpower approach assumes that it is possible to forecast the future needs of society for highly qualified manpower in a whole series of separate occupations. Expansion or contraction in expenditure on given subject areas would depend on a forecast selecting particular areas of occupation (and therefore subject study) for expansion, while other areas of occupation might be forecast to decline - and thus expenditure would be reduced in related subject studies of higher education.

In most countries of Western Europe some amalgam of these three approaches decides the sum of money which governments finally allocate to expenditure on higher education. The current economic outlook, however, appears to limit seriously the possibility of providing higher education up to the maximum of social demand.

The conclusion must be that there will be competitive entry, among those with minimum (or better) qualification for admission to institutions of higher education.

If competition is to determine entry to higher education it is likely to vary very much from

faculty to faculty, e.g. we can expect a continuing expansion for some years of demand for medical students, but perhaps a declining demand for students of sociology. There may be a rising demand for engineers, but a falling demand for university qualified librarians.

These variations of demand from university or higher education faculties are likely themselves to vary over a period of time. e.g. once the demand for medical students is met, then those numbers may stabilise, while the demand for some other faculty, e.g. mathematicians for computer management may expand.

Such variation of demand seems likely to involve different faculties of universities in deciding upon their own numbers for admission. As the numbers for faculty admission exceed demand, so it will become necessary to provide a competitive examination by which to select those most suitable for out of all those candidates with the minimum qualifications.

Even now, faculty requirements are used in the United Kingdom to limit admission to the best qualified. Medical faculties of universities in France have employed separate examination techniques in order to avoid accepting all comers with a Baccalauréat.

A terminal secondary examination without "Failures"

However the future higher education system works out its procedures for admission to its institutions, that system must retain a division between those who pass i.e. are admitted to higher education and those who "fail" i.e. are not admitted to higher education.

For the pupil expecting to leave the education system at the age of 18 it seems unnecessary to retain the pass/fail concept.

Such pupils will be going to work. Employers will need to know what has been achieved at secondary school by potential employees.

A secondary terminal certificate, uncomplicated by the necessity to accord "pass" or "failure" for entry to higher education might well state simply the achievement of pupils by a classification for each subject. Thus if a twenty point scale were to be employed, such a certificate would state achievement at the completion of a course e.g. as follows :

Subject	Achievement level. Maximum 20
Mother tongue	16
Geography	2
History	11
Mathematics	8
Foreign language	14 and so on for all subjects studied

There is no necessity, nor is there any advantage in stating a pass mark or a failure mark.

Economics in the future secondary school

How then do we see economics as a subject of study at the upper secondary level over the (possibly) entire range of human ability capable of absorbing school education ?

First, academic economics will not be suitable for the entire ability range. Commerce, in its

shape as factual information about economic practice may, however be suitable for wide areas of ability range.

Second, Economics appropriately taught is a subject which can command interest over an extensive ability range.

Third, in terms of university entrance, academic economics covers both literate, and numerate approaches to study. It can therefore be expected to appear as a faculty examination for admission to university or higher education schools studying economics.

Need for guidance into careers and into higher education

The future secondary school is certain to need professionally qualified people to give advice both about careers and about possible forms of higher education.

Careers advice will have to cover every possible kind of occupation ; for the ability range will cover every possible kind of employee.

But it will be equally important for advice to be available over a whole range of higher education possibilities. Much of our discussion in this chapter has, of necessity been related to a choice at the age of 18 between one form and another of tertiary education.

It will be possible for example for the pupil who has studied commerce/economics up to the age of 18 to go on to an advanced secretarial course for girls, or a computer operator course for boys. Tertiary education can mean in the United Kingdom as in Germany or France full-time further education for one, two, or three years in different types of educational institution and at different levels of study.

Just as we have anticipated a vast expansion in the demand for voluntary full-time education to the age of 18, so we must expect that expansion to lead to a large extension of the demand for full-time further education after the age of eighteen. In future it will become a major task both of a secondary terminal examination system, and of highly qualified professional advisers to guide young people into forms of further education other than the university.

Research required

Examination system tend to provide for educational circumstances long outdated. There is no shortage of forecasts about the shape and size of future secondary education. There is, however, a shortage of constructive thought about the provision of an examination system properly designed to meet the educational needs of the prospective situation. Research is urgently needed to provide for Western European countries a secondary school examination structure designed for the future rather than the past.

CHAPTER VI

METHODS OF TEACHING ECONOMICS

Economics is unlike conventional school subjects, because it is possible to acquire a considerable amount of economic knowledge from the communications media of daily life. If we did not study a modern foreign language, or history or geography at school, apart from an exceptional case, we should be unlikely to absorb much knowledge of such subjects from our normal lives. Economics, like the study of government is different from school-orientated subjects, because economics and government affect many aspects of living. The newspapers, radio, television - even personal conversation are all sources of education about economics and government.

This personal involvement of pupils and students in economic life makes exceptional demands upon the teachers of economics. Not only must the teachers expend much time in keeping up to date, they must also utilise a great deal of flexibility in teaching because their pupils come to them with widely different areas of knowledge about economics. Experience of buying and selling comes early to some young people. To them the haggling of the market place is part of their daily lives. Their experience may vary or even contradict the teacher's theoretical economic propositions.

Even the technical methods of input information to the pupils of economics, must vary from home to home. Some homes have television sets, but some do not. Some homes take a newspaper which specialises in pictures and crime and sport, while other homes share a newspaper which offers informed comment about economic affairs.

It thus becomes a matter of necessity for the teacher of economics to call upon a very wide variety of methods and resources for teaching purposes. The pressure is yet further intensified because, in some countries of Western Europe, economics tends to be an additional or extra subject, and so claims a relatively small share of weekly teaching time, over a limited number of teaching years. Thus, pressures of several kinds force upon both pupil and teacher of economics an exceptional need to optimise the use of time and materials in order to accommodate the economic aspects of the "explosion" of knowledge.

Psychological and Pedagogical Theories

We have already referred (p. 28)to the importance, in the study of economics of a taxonomy of educational objectives, such as those of Professor B. S. Bloom. This classification of objectives is a valuable tool of analysis for every teacher in determining the approach to teaching.

Sequences of ideas are also important in teaching method. We have referred to the different approaches in different countries to the teaching of economics. Some countries customarily begin through macro-economics, and procede to micro-economics. Other countries reverse this process. It is possible to begin with applied economics and procede to theory. Or, some teachers may prefer a distinction between descriptive and analytical economics. All these different lines of thinking have their impact upon teaching method, for they pre-determine the sequence in which teachers present different areas of economics.

Piaget has drawn a distinction between three sequential areas of study. These are

1. pre-operational
2. concrete operational, and
3. formal operational.

For teachers, this analysis means

1. a careful preparation of groundwork in a new discipline, followed by
2. a solid period of introducing new material to the pupils, so that
3. the pupils may apply their new-found area of knowledge to new situations.

Some research work on the production of learning models at the University of Manchester is based upon the "spiral curriculum" theory of Bruner. This approach implies that subjects mature in the minds of learners over a long period of time, and often in association with other, perhaps related subjects. The theory supports the introduction of "mature" subjects quite early in school life, such as at the age of 12 or 13, and the incorporation of economics into a nexus of complementary subjects such as commerce, social studies, civics and office practice.

The most recent invasion of educational theory has been that of Skinner whose dramatic adaptation of step-by-step learning has led to machine teaching through programmed learning.

All these theories are beginning to have their impact upon methods of teaching economics. New theories have established a need for more research, and more research inevitably seems to lead to yet more research.

Research and investigation

Fortunately for the pupils, teachers have a certain in-built resistance to change for the sake of change. Yet, at the same time, teachers are ready to adapt their methods to new theory provided that the theory is thoroughly tested out and can be shown both to have wide application and to produce results.

Two research projects of potentially fundamental application to economics are taking place in the United Kingdom at the time of writing. These are the Manchester Economics project and the Economics Education Project.

The Manchester economics project

This project was set up to create new text books and teaching materials properly appropriate to the teaching of economics at the upper secondary school level. For some years, teachers of economics at this level in the United Kingdom have been dissatisfied with the available text books because they were almost invariably written for the university student. The sophistication both of language and ideas in such books compelled the teachers to waste a great deal of valuable teaching time on re-interpreting language and ideas for the benefit of sixteen or seventeen year old school pupils.

An educational publisher (Ginn. and Co.) became interested in producing materials for teaching economics, and so joined the National Extension College (Cambridge) and the Nuffield Resources for Learning Foundation in the formation of an advisory group to manage the project. Professor C. Sandford of Bath University agreed to be chairman of the group.

The project was designed to include teachers in the design of economics resource materials. A new form of text book has been specially written for the 16 - 18 years age-group, and teaching extends outwards from the experience to be expected of the young people. A series of supporting booklets has also been written on specific economics topics, both with a view to deepening specialist study in given areas, and yet maintaining the dynamic flow of economic information, by providing for continuous up-dating of information from sources such as television, radio, newspapers and journals.

Supporting materials for this programme are to be provided in the form of ten sound films lasting 15 to 20 minutes ; film strips ; transparencies for use with an overhead projector ; and a wallet containing reproductions of economic documents. A study guide is available for students wholly without access to a teacher. The project materials were pre-tested in one school during the academic year 1968 69 and operationally tested in thirty-six schools and colleges during the academic year 1969/70. A multiple choice objective test of achievement will be made at the end of the first year of study. At the end of the second year, the results of the terminal secondary examination will form the basis of a research analysis of an assessment of the use of the teaching materials.

The economics education project

The objective of this project is to raise the level of economics literacy (general knowledge) within the United Kingdom. The method of approach is

1. to establish a concensus of opinion about economic literacy
2. to collect, tabulate and analyse data on economics teaching and economics understanding and by this means to assess, in quantitative terms, the importance of different factors in the learning process
3. to discover the best methods of presenting economics information to learners.

A pilot study was undertaken during 1968/69 within schools in Scotland which offered economics at the upper secondary level. A comprehensive study was carried out during 1969/70 of most of the schools and colleges in the United Kingdom offering economics. Similar studies have been made of university students during their first year of university study.

The method of procedure has been to devise an objective style test of economics to all students at the appropriate level. In order to discover if there were a correlation between knowledge of economics and intelligence, an intelligence test (A.H. 5. National Foundation of Educational Research) was administered to the same groups of students. A complex statistical study based on factorial analysis is to be completed and published for the benefit of teachers.

In the meantime, a preliminary report on university level students of economics gives the following findings :

1. Males knew significantly more economics than females ; but neither age nor year at university was important. The effect of intelligence test scores, while significant and positive as expected, was not substantial.
2. Students at university who had studied economics at the upper secondary level knew substantially more economics at university than those who had not. Mathematics appeared to be a valuable supporting subject to economics, but history and geography did not.
3. On average, those students who had attended a further education college (instead of a school) showed a higher level of understanding of economics than those who had studied through the conventional school route.

Face to face teaching

No doubt the research projects outlined above could be duplicated in many countries of Western Europe. The projects are simply evidence of a general renaissance in the study of teaching method applied to the faculty of economics. Teachers, however must go on with their daily job of teaching while awaiting the results of research. We shall aim therefore to set out some of the many ways in which the teachers of economics in Western European countries are approaching that daily task.

TABLE 18 - Methodology of Teaching Economics

	A	B	CY	DK	EIR	F	D	I	M	NL	N	S	CH	GB
1. Lecture (cours magistral)	B	C	C	C	C	B	A	C	C	C	B	B	C	C
2. Tutorial (teacher-led group discussion)	C	B	-	B	B	B	B	A	B	A	-	C	B	B
3. Class discussion	C	A	C	C	B	A	B	B	B	C	A	C	B	B
4. Preparing oral reports	B	B	A	B	-	A	B	A	A	B	A	C	B	B
5. Written reports	A	C	B	A	-	-	A	C	B	A	B	B	C	A
6. Newspaper reading	C	A	A	B	-	B	B	A	B	B	A	B	B	B
7. Private reading of general works	C	A	A	-	-	B	C	A	B	A	-	B	A	B
8. Private reading of textbooks	C	A	-	A	C	C	C	C	B	A	-	B	A	C
9. Reports on private reading	B	A	-	A	-	B	C	-	B	B	-	C	A	A
10. Tests on private reading	C	A	-	-	-	B	C	-	A	A	-	A	A	A
11. Revision tests (a) objective	(o)	C	B	B	C	A	C	B	C	B	A	C	A	A
(b) essay questions	C	A	C	B	A	B	B	A	C	C	B	A	C	C
12. Use of programmed texts	C	A	-	A	-	-	A	C	-	A	-	B	-	A
13. Statistical work	B	A	-	C	-	B	A	B	B	B	A	B	B	A
14. Graphical work	C	A	A	C	-	B	A	B	B	C	B	B	B	B
15. Collecting and interpreting data	B	A	-	A	-	B	B	A	A	B	-	C	B	B
16. Learning definitions and laws	A	B	B	B	C	A	B	C	B	C	B	C	C	C
17. Audio-visual work (radio, T.V., etc.)	B	A	-	A	-	A	C	B	B	A	A	C	A	A
18. Project work	A	-	A	-	-	A	A	-	A	A	-	C	A	A
19. External visits	B	B	A	A	-	A	B	B	A	B	C	B	B	B
20. Monographs of individual organisations	A	B	-	-	-	A	A	-	A	A	-	B	A	A
21. Visits from economics experts	C	-	B	A	-	A	-	A	A	A	-	B	A	B

Key : A = Rarely used
B = Quite often used
C = Very often used

Notes : (o) Informal oral
5. These usually follow on from work that has been reported and discussed in class.
7. i.e. from a recommended list.
8. Set preparation, i.e. at home.
13-14 These are instruction classes.
15. Self-study amongst reference books rather than direct investigation.

We set out in table 18 an analysis of the methods used in a number of the Western European countries. In order to achieve a qualitative assessment of the relative importance of the use of each method, the use of each method is assessed under three grades.

A = rarely used
B = quite often used
C = very often used.

By glancing at the frequency of assessment "C" (very often used) in table 18 it is possible to see that the more conventional methods, such as lectures, class discussion and private reading of textbooks retain considerable support. Whereas the relative frequency of assessment "A" (rarely used) is very noticeable in relation to newer methods such as project work, monographs of individual organisations, visits from economics expert and use of audio-visual media. Nevertheless, such relatively modern methods are shown as in use in most countries of Western Europe. The width and variety of methods of teaching shown in almost every country in the table gives some measure of the intensity of teacher activity in the subject of economics.

The lecture

The stress still laid upon the lecture as a method of teaching should perhaps be modified by relating it to the changing nature of the lecture. In schools, the lecture is commonly becoming less formal. Instead of the silent, note-taking class of unmoving children there is arising a form of participation education. Children are now encouraged to ask questions, to require an explanation of difficult points, and even to present a point of discussion if suitable time is available. The formal lecture has been shown by considerable research to be a relatively poor method of communication. Everywhere, the lecture teaching method is being replaced or complemented by additional methods of enabling children to learn. In Malta, for example, reference is made to the lecture method as customarily used by the teacher, but this point is qualified by a statement that the lecture is followed usually by questions from students and class discussions. The French method of approach specifically states in its official instructions for the subject of economics and social studies that the teacher should avoid the lecture method.

The seminar

The seminar, or discussion group, is becoming a commonly used core-form of teaching within the classroom. In table 18 this method of teaching is shown in items 2 (Tutorial) and 3 (Class discussion). In this form of teaching the teacher provides leadership and is a source of reference for information. The students may be enabled to re-capitulate, in discussion form, the new material already presented by the teacher. Ideally, in these circumstances the teacher may become the chairman of a meeting, keeping order, guiding discussion, but intervening only when the learning process needs a new stimulus or the answer is required to a question.

The seminar style of teaching can also be well adapted to the Socratic approach, i.e. questions designed to derive answers which both stimulate a thinking and learning process in the answerer, but also provide both thinking and learning processes for all persons within the learning group.

Dividing the class into learning groups

The Swedish Läroplan for the teaching of business studies has set out weekly plans of study in which for each subject the group meets as a whole class once a week only. For the rest of the study time, the class is divided into smaller groups involved in self-motivating study. We give below an

example of the plan of work for two weeks - covering a unit of teaching in International Economics.

Week 1	Week 2
Lesson 1 Whole class	Class discussion
Lesson 2 Divide into groups	Test
Lesson 3 Groups and class discussion	Test
Lesson 4 Groups	
Lesson 5 Groups	

It will be obvious that this plan of study invites complete re-thinking both of the classroom as the sole form of teaching accommodation, and of the whole class group as the sole learning structure.

Technical aids to teaching

All the methods of teaching mentioned above can now be supported by an impressive array of technical aids. Table 19, set out below, shows an equally impressive response to a country-by-country analysis of the audio-visual aids used. It is not to be expected that all these aids will be found in every school, nor that every teacher will wish to employ them. It is, however, to the advantage of everyteachers'to know that such technical aids exist, that they are improving in quality and quantity throughout most highly developed countries, and that teachers demands for professionally designed supporting teaching materials are likely to be met.

TABLE 19 - Use of audio-visual aids

Country	TV	Radio	Films	Slides	Overhead Projector
Austria	B	B	B	B	B
Belgium	B	B	B	B	B
Cyprus			B	B	B
Denmark					
France	A			A	A
Fed.Rep. of Germany	A	A	A	A	A
Italy	A	A	A	A	A
Malta			B	B	
Netherlands	B		B	B	B
Norway		A			A
Sweden	A	A		A	A
Switzerland		B	B	B	B
United Kingdom	A	A	A	A	A

Key : A = Occasionally used B = Frequently used

The OECD report on Curriculum Improvement and Educational Development quoted figures showing that in Japan by 1962 nearly 100 per cent of primary and secondary schools were equipped with radio, and that well over half of all schools possessed television sets. That same OECD report referred to the fact that, in Europe there was a growing tendency to integrate the use of technical

teaching aids into normal teaching programmes. This tendency is replacing the earlier approach, in which television and radio programmes were utilised as "enrichment" i. e. additions to teaching, rather than directly supporting or included in the teaching programme.

Within the past ten years yet newer technical teaching aids have presented themselves. Closed circuit television has been enthusiastically taken up by some of the world's larger education authorities such as that of Glasgow in Scotland and London in England . Teachers form the production basis of the programmes broadcast on closed circuit television. By 1971, the Inner London Education Authority had nine channels of Educational television available to all the schools and colleges in the London area. The University of London made special arrangements to utilise the programmes in cases where they were appropriate for undergraduate teaching.

Television has become so such a way of life for the home in the Western world that it was inevitable to call upon television as a teaching medium. Not only is it possible to prepare and present economics programmes through specially provided educational television, it is also possible to use the video tape recorder to record useful programmes from state or commercial television. By this process commercially made programmes may be presented to the students or pupils in an educational institution. Cassettes can then be used to replay the material over the same television set. The potentialities of these devices for self-learning situations have, so far been scarcely understood, and even more scarcely used, but they seem bound to form part of a teaching and learning strategy in the future.

Self-motivated learning

For the future, technological capability combines with current social philosophy to concentrate far more of the teaching process on the learner. The teacher seems likely to become a manager of teaching resources, and a leader of group dynamics, combining these functions with individual study guidance based on personal knowledge of the pupil.

The library was once a silent, self-centred lender of books. Soon it will become a resource centre with unsilenced study rooms, radio listening booths for audio-tapes and television viewing booths for video-tapes.

The pupil is, in many countries now encouraged to see the school as a learning centre, and himself as a positive seeker after knowledge. Long, extended essays are set to pupils, in order to institutionalise or canalise the search for information, the amassing of material, the sorting and collation, the selection, organisation and presentation of information, all of which form an essential part of the realities of the use of economics in business or administrative undertakings.

Some countries organise closely structured projects in order to stimulate individual learning. The Nordrhein Westfalen Land of the Federal Republic of Germany, for example, sets up units of study for its students of economics. The study might begin with a visit to a business enterprise. Its technical and economic organisation can then be described and discussed. Trade reports of the firm, an analysis of its accounts, its methods of management may all be used as ways to direct the pupils on to self-motivated study of the economic principles underlying the activity of the firm.

Even more highly structured projects can be seen in the Swedish Läroplan for business studies. Here, the case studies approach places the student or pupil in a simulated role-playing situation. Here is the firm, says the plan. Here is its income, its capital, its sales, its employment structure. Now you, the economic adviser, must work out for yourself the strategy of action. Study the accounts, assess the market, consider the employment prospects, look at the national economic situation and advise the owners.

The role of the pupil in project teaching has become active. Self-involvement provides motivation. Practical activity stimulates interest. By contrast, the role of the teacher has become more passive. He is still an essential part of the teaching process, but his role is to guide learning rather than communicate information.

Practical observation

Just as the classroom is ceasing to be the sole teaching space in the school, so the school is ceasing to be the sole centre of education. "Learning by seeing" was, a hundred years ago, a very necessary method of teaching the static, unwilling, and untutored school pupil about objects (such as shells) which had never been seen. The modern school child arrives at his primary school with a wealth of knowledge already gleaned about "objects" from travel, from books, and from knowledgeable parents. But learning by seeing has not ceased, nor is it limited to the television viewer.

Visists to industrial and commercial premises now form a standard part - even though small - of many forms of economic and commercial education. The Austrian teaching plan for the busines, studies pupils at the Handelsakademie refers to field work in the form of visits to factories and other places of interest. The French methodology emphasises a need for direct observation (where geographical circumstances permit) based on a local example of industry or commerce. Students are to be involved in the preparation of a monograph on the organisation to be studied. A glance back at table 18 (p. 76) will show that all the countries (except Ireland) give support to external visits for their pupils. - And Eire introduced economics as a study at upper secondary level in 1971 so it is a little unfair to notice omissions in their teaching method.

Practical observation may well be coupled, in the future with practical action as a means of learning about economics. Substantial numbers of young people work in a temporary capacity as soon as the legal age is reached for such activity. Some countries encourage short periods of "practice work" in industry or commerce in order to enable young people to discover whether or not they may like to pursue a particular career. It may be no more than an extension of these ideas to expect, in the future, to find that all pupils, or students of economics should be provided with opportunities to learn some economics at first hand by practical experience in the work situation.

Precision thinking in economics

The impact of the computer has added a dimension of precision to many aspects of business data processing, and to large areas of public administration. Precision has, for many years been an important feature of educational preparation for engineering industries, and for many aspects of manufacturing production. There is an equal need for precision in the clerical, sales and administrative processes which support or direct productive processes. Yet, so far we have rarely placed so much stress upon accuracy in the clerical processes as we have on manufacturing processes. The computer must change this attitude of mind. Clerical mistakes in computer programming or input information to computer processes will, in future become extremely costly, time-consuming and disruptive.

Hence, it is essential for any pupil or student studying economics either for use in business processes, or in public administrative processes to acquire a high level of skill in the precise use of numbers.

The Swedish business studies programme underpins the study of economics with a study of accountancy in order to ensure a sensitivity to the use of numbers. The Läroplan specifies that, in the general method of study, a high standard of precision should always be demanded , particularly for

accounting. The pupil should be expected to put facts and figures to use and not store them in his memory.

In the United Kigdom, the Economics Association stresses that, in written work, the student should be encouraged to develop a scientific attitude of mind and to adopt scientific method. Precise expression must be insisted upon and irrelevancies eliminated.

The French approach is to avoid the lecture method and to concentrate on a study of topics derived from concrete analysis, observation, statistics and texts.

Denmark expects that work on statistical material and texts should form a central part of the course, and that pupils shall be shown both the usefulness and the limitations of statistics.

From the Federal Republic of Germany we have two examples. The Land (province) of Baden Wurtemberg requires that the basis of instruction is problem solving. The Land of Nordrhein Westfalen places strong emphasis on the learning of statistical and mathematical techniques.

These examples are simply straws which indicate the way the wind is blowing in the development of thinking about the teaching of economics. In the past there has been a tendency, at the upper secondary level of school, to teach the academic, intellectual and theoretical aspects of economics. For the future, we can expect throughout Western Europe, that the teaching of economics will incorporate a dimension of precision thinking through associated study of mathematics, statistics, economic model building, problem solving, or scientific method. This wind of change is blowing hard, and will require yet another area of re-adaptation for the teacher of economics.

Conclusion

Adaptation must become a key word for all teachers of economics. Adaptation is necessary to adjust to new learning theories, to incorporate new teaching techniques, to use professional discretion in the employment of technical aids, to adjust to, and utilise, educational influences outside the school, to include a numerical capability, and, above all, to keep up to date with a dynamic subject. Such paragons of teaching virtue will not be easy to find. We turn next to a study of the training of teachers of economics in order to discover if the teacher-training system can help to produce the ideal teachers of economics.

CHAPTER VII

TRAINING THE TEACHERS

The dynamic nature of methodology in the teaching of economics is bound to affect the training of teachers of economics. It would not be unfair at present to argue that the training of teachers in economics is well behind the advances in methodology and content. In principle, this relative failure to relate teaching training programmes to the best new methodology may be overcome by in-service training programmes. In practice, such in-service training programmes are too few, or too infrequent, or sparsely attented.

It is important also to recall the fact that, once teachers have been trained, they may continue to teach the same subject, in the same way for the following forty years. Hence, there is an urgency about the need to structure teacher training programmes so that they prepare for the future rather than imitate the past.

Some of the future problems of teaching economics, such as the professional use of educational technology have been mentioned in the chapter on method. There are however, additional aspects in the teaching of economics which merit special attention. One of these aspects concerns the need to train the teachers to keep constantly up to date with changing areas of knowledge. Another relates to the fact that pupils in any given teacher group may commence a course with vastly differing amounts of knowledge about economics. A third aspect stems from the fact that these pupils are rarely among the most academically gifted. A fourth problem arises from the wide variety of careers into which some study of economics may lead. Finally, there is the advisability for teachers of economics, to have had opportunity for practical work experience, preferably in several occupations, so that teaching may be dramatised by realistic examples.

The supply of teachers

With the exception of Sweden, virtually all the countries of Western Europe have a shortage of properly qualified teachers of economics. More and more pupils wish to study the subject. More and more countries place importance on the study of economics at the upper secondary level. The expansion in demand for economics teachers has not been accompanied by an expansion in supply. In pure economic theory, this characteristic market situation should, theoretically, lead to a rise in the price of teachers of economics. In practical life, however, the price of teachers remains the same for all subjects. Hence, the only way to match supply and demand is to increase the supply of teachers of economics by providing specialist training facilities for them.

One of the current methods of meeting the shortage of teachers of economics is to encourage or persuade teachers of other subjects to switch to teaching economics. It is common in Western European countries to find economics teachers who have formerly specialised in history, or geography, or commercial studies. Of course, some teachers are good teachers of almost any subjects, but, in general we cannot expect to find a relevant level of expertise in the teaching of economics among teachers who have been specially educated and trained to teach other subjects. For a few years the subject of economics is bound to suffer from a failure of the teacher training system to produce sufficient properly trained economics teachers. In time, however, and given suitably devised teacher-training programmes, we can expect the subject of economics to produce its own specially orientated teachers from the expansion of its study both in schools and in universities.

Economics graduates in short supply

In the meantime, it is essential that the education systems do prepare suitably devised teacher training programmes for teachers of economics. Both the programme and the future career will have to be properly publicised, for education competes with industry, commerce and public administration for the limited supply of economics graduates. It is likely that, for some years, the attractiveness of these occupations other than teaching, will claim a high proportion of economics graduates. This likely situation re-emphasises the necessity for education to provide specialist teacher-training for economists, so that some proportion of the output of economists will be committed to teaching at a relatively early stage in their careers.

No shortage in Sweden

Sweden is the one country of Western Europe in which there appears to be no shortage of economics teachers. Of those who graduate from university in economics as many as fifteen per cent may become teachers. Good working conditions, and a high rate of payment are regarded as the two major explanations of this desirable supply of economics teachers. At present, about half the teachers of economics in Sweden are teaching in the gymnasium (academic secondary school). In future, these same teachers are likely to be available for some teaching to the pupils now in secondary vocational and continuation schools for these three types of school (gymnasium, vocational and continuation) are to be combined in a comprehensive form of education.

Effect on economics of comprehensive schools

The combination of several different types of school at the secondary level into comprehensive schools is now under way or under consideration throughout Western Europe. This amalgamation of several different types of pupils into one educational institution is likely to have profound effects on the teaching of economics.

The teaching of economics is relatively speaking, uncommon in the academic secondary schools of Western Europe. Such schools have catered for the academically gifted children. Such children have usually been offered traditional programmes of subjects - mostly pre-determined by the demands of a university entrance qualification. Therefore, until the past ten to fifteen years, economics has been a relatively rare subject in the academic secondary school. This relative rarity places a Head Teacher in difficulties in recruiting staff for teaching economics. Often, the subject has been taught to the pupils after the age of 15 or 16, and the total amount of teaching time for economics in a given school may be no more than four or five hours a week.

This situation inhibited many Head Teachers from introducing the subject of economics. Those Head Teachers who did introduce economics either had to find a teacher of some other subject willing to teach economics, or to recruit a teacher of economics willing to teach other subjects for, perhaps, fifteen hours a week.

These limiting circumstances may well disappear if several branches of secondary education are linked together. It will be possible to recruit specialist economics teachers and offer them teaching over a wide ability range and over a fairly wide age range.

Length of the teacher training course

In general terms, the course of education and training for economics teachers lasts four years for the academic content. In addition to the academic content there are study periods for pedagogic preparation varying from two years down to none at all. Table 20 (below) shows the position of many of the countries of Western Europe.

TABLE 20 - Academic and pedagogic preparation for teachers of economics

Country	Academic preparation	Pedagogic preparation
Austria	4 years	Included in academic course
Cyprus	4 years	6 weeks during the first 2 years
Denmark	6 years	6 months
France	4 years	8 months
Fed. Rep. of Germany	4 years	Included in academic course
Italy	4 years	None
Luxembourg	4 years	2 years
Netherlands	4 years	1 year
Norway	4 - 5 years	1 year
Sweden	4 years	1 year
Switzerland	4 years	Included in academic course
Turkey	4 years	Included in academic course
United Kingdom	3 years	1 year

It will be noted that four countries; Austria, the Federal Republic of Germany, Switzerland and Turkey provide their pedagogical training concurrently with academic study. In all other cases where teaching training is provided, the academic education is completed first and is then followed by a period of pedagogic training. It is important to add that, in a number of countries, the pedagogic training is not necessarily related to the specialist subject of economics. This is a major weakness which must be overcome in the future.

It is also questionable whether pedagogic training should be separated from academic study. If the two aspects of a teacher's professional equipment, i.e. academic knowledge and teaching expertise could be associated from the beginning of the course of study, the student would be forced to relate his new-found knowledge to his ability to communicate that knowledge to children. This process might serve to avoid the over-academic approach to teaching which merely reflects the academic practice of university study.

Content of teacher-training course

Whether pedagogic training is provided concurrently with academic study, or consecutive to it, there is a clear need to equate the pedagogic training both with the needs of the children to be taught and with the specialist aspects of economics.

It is essential to equip the intending teacher with a good knowledge of the psychological theories of learning, especially those we outlined in chapter V. (Bruner, Piaget, Bloom and Skinner). It will be equally important to provide the teachers with some psychological insight into the special needs of the age groups of boys and girls they are expected to teach.

But this background of professionalism is essential to every teacher and is not specific to economics. Economics does, however have special problems such as those to which reference is made at the beginning of this chapter i.e.

1. keeping up to date
2. varying sources of economics knowledge in pupils
3. an average, rather than high ability among pupils
4. wide variety of career outlets for pupils
5. advisability of practical work experience.

In addition we should certainly add :

6. the unusual extent and variety of different methods of teaching as set out in chapter V.

Teaching practice

It is a commonplace remark among students from teaching training colleges that the sole sector of the course to be of real value was the period of practice teaching. If the students are right, then the constructors of the courses need to reconsider the programme. But even if the students are wrong, and are unconsciously using the course content to shape their teaching, it is still undeniable that practice on the job teaches more quickly and more impressively than listening to abstract theory.

Western European countries have a widely different approach to teaching practice. Belgium, Italy, and Cyprus appear to provide none for teachers of economics. However, teachers in Cyprus may be appointed without pedagogic preparation, but must undertake a six-week course in pedagogics during the first two years of teaching. Switzerland requires teaching practice of two hours a week over a period of two years plus one month of full-time experience. The most common period of teaching practice in Western Europe is one term which is taken towards the end of the course of study. Luxembourg however requires one full year as a trial teaching period. In some of the Länder of the Federal Republic of Germany the trial teaching period is two years, though the shortage of teachers may compel a reduction of this time to one year.

Industrial and commercial experience

We have referred already to the exceptional need for teachers to have opportunities for industrial and commercial experience in order to enliven their teaching. Switzerland, Luxembourg and Sweden all require their teachers of economics to have worked in industry before teaching, although a shortage of teachers is compelling some (presumably temporary) relaxation of this policy. Other countries would like to impose a similar condition for teachers of economics, but are deterred by the current shortage of teachers in this discipline. It seems essential that any future teacher-training programme for economics teachers must aim to incorporate some aspect of practical work experience.

Continuous updating

One or two periods of practical work experience will not, however suffice over a teaching career of forty years. How many teachers of economics with ten years of full-time teaching experience will be thoroughly conversant with the economic implications of computers ? Economic practice is changed at the macro-economic level every time there is a variation in the level of state intervention in the economic life. Continuous updating is not only essential in terms of an expanding body of knowledge, it is also required of a constantly changing body of practice - even the economic consequences of the taxation system are liable to change annually, - and the taxation system can have very profound effects upon economic activity.

It may be possible for some aspects of practical updating to be undertaken in the rather long summer vacation period in most school systems. Sabbatical terms are, in some countries available for academic replenishment. Perhaps we should investigate sabbatical terms for the re-investigation of teaching through practical work experience ?

In-service training

In any event, the teacher-training system should provide for a vastly extended programme of in-service training for teachers of economics.

Some such opportunities already exist on a rather limited scale. One-week courses are held in Paris during the course of the school year, and one-day courses are available in most of the provinces. In Sweden one-day in-service training courses are offered by local authorities. Attendance is compulsory and each teacher must attend four or five such courses each year. Additional, voluntary courses, are offered of one or two weeks duration.

Teachers' centres

A relatively new feature of the educational scene in the United Kingdom is the formation of teachers' centres for specialist study and research. Many local Education Authorities have set up such centres. The centres are usually based on a particular school. Accomodation is made available, and often a teacher-warden is appointed to provide a permanent member of staff for the management of the activities of the centre. Teachers form groups teaching specialist subjects and meet together for discussion, research and re-development of teaching programmes, syllabus structures and exchange of information about method. Such centres could form the ideal base for economics teachers who often lead lonely teaching lives because there is rarely more than one teacher of economics in each school.

Teachers' associations

Teachers associations with a special subject interest also offer good possibilities of in-service teacher development. In Sweden there is a professional association, Föreningen Lärare i Företagsekonomi, for teachers of business economics. This association produces a magazine and is currently in the process of setting up an item bank of objective test items (please see chapter VIII).

The United Kingdom has its Economics Association which arranges meetings and conferences and publishes its own journal which often contains articles about teaching method.

In France there is no professional teachers' association for economics, but the Institut Pédagogique National produces termly bulletins on the teaching of economics. These bulletins provide statistics, suggestions for practical work and short reports.

In Denmark there has recently been set up a teachers' association for the teaching of economics.

It is evident that the existence of such teachers' associations can be of great value in breaking down the relative isolation of the teacher of economics. There has been some discussion about the formation of a European Association of Economics Teachers. Such an association could add a new dimension of quality to the teaching of economics throughout Europe. It is much to be hoped that the Council of Europe may find it possible to devote some resources to the inauguration and initial formation of such an association of economics teachers.

A European centre for documentation and information in the teaching of economics

Even further support for the economics teachers in European countries could be gained if there could be a European centre for documentation and information in the teaching of economics. National centres of documentation could work closely with such a European centre, exchanging information and supplying all teachers both with comparative data about methodology and also providing them with a rich source of economic information about Europe.

The teacher as manager of resources

A wealth of new information and a plethora of educational technology must be intelligently and resourcefully utilised if the pupils are to gain the maximum advantage from these sources. To reinforce these sources of teaching information, must be added the new styles of methodology which require the student to undertake a much more positive role, in future, in the learning process. These three strands of policy and practice combine to enforce a role of manager upon teachers in the future. The teacher must decide how, when and where to make sources of information available. The teacher must decide how, when and where to employ different aspects of educational technology. The teacher must decide the teaching plan, and the allocation of time which will enable the pupil to gain the maximum form the learning situation.

This new relationship between teacher and pupil itself implies a necessity for the teacher to take many decisions, and not least, the decisions required to allocate his own time economically. The teacher-manager must be prepared, by training if necessary, to manage himself.

Team teaching

Even more complex human relationship problems will arise if the evolution of comprehensive education creates such large schools that it will become possible to employ two or more teachers of economics. Two or more teachers of economics may believe it possible to maximise their teaching impact upon the pupils by methods of team teaching.

Team teaching is not new to the teaching world in general, but it is new to the teaching of economics because of the small number of teachers hitherto involved in teaching the subject in any given school.

In the United Kingdom, Leeds Grammar School have undertaken an extensive experiment in the team teaching of economics. The method involves the co-operative planning, teaching and evaluation of groups of children so as to take advantage of the special competences of the members of the team.

In the Leeds Grammar School experiment, eight standard periods for a normal class were divided into three lecture periods (attended by all pupils) and five seminar or discussion groups (attended by small groups of pupils). Teachers worked as a team, dividing up the syllabus so that each teacher might call upon his specialist knowledge in the lecture teaching periods. Similarly, all the teachers shared in the supportive or recapitulatory teaching undertaken in the seminar periods. Directed private study was a further feature of the scheme. The teachers supervised private study by the pupils. Sufficient time had been saved by the team-teaching method to permit much more individual attention to the needs of the pupils.

It should be added that team-teaching is not restricted to the teaching of individual subjects. There are likely to be many examples in future of a multi-disciplinary approach to teaching. Perhaps

this is rather more likely at the lower secondary level where we can see commercial education deriving considerable benefit from team teaching of commerce, book-keeping, and even the secretarial skills of shorthand and typewriting But, even at the upper secondary level, there will certainly be schools within Europe which will aim to pursue the concept of a unified education through team teaching.

Such experiments are likely to become more common as schools grow in size, or as upper secondary specialist schools develop and expand in numbers. It is obvious that team teaching demands new skills of human relationships. These developing techniques should also form part of the equipment provided to teachers through the teacher-training programme.

Research and development

So much that is new and exciting and developing has been mentioned in this chapter that it appears somewhat dampening to refer to a need to validate new methods and new technologies before recommending general adoption. But general adoption can result only from general acceptance, and general acceptance can come about only when the teachers are satisfied that what is new is necessarily good.

This is the function of research and development. More effort (and more money) needs to be devoted to research by teacher-training institutions. Only in Sweden can we find a Professor of Economics Education, and only in Norway is there a College of Economic Education. Europe cannot afford to leave to Scandinavia the sole representatives of academic and institutional economic education. Research and development into economics education must become a well- supported educational function in every country which claims to teach economics to its children.

CHAPTER VIII

ASSESSING THE CANDIDATES

If one of those science fiction beings should ever land on earth, it is unlikely that "he" would wish merely to occupy the territory. We may reasonably assume, from our own journeys to the moon, that this other-worldly intelligence will come wielding scientific instruments, and supported by an army of research workers. The first research project might well be to examine the social structure of the inhabitants, and to report back on their methods of raising the level of technology through successive generations of earth people.

The report of these external examiners might be reasonably satisfactory in relation to results over the past 100 years. Yet we may well wonder how such a visiting research team might react to the methods used in education for the assessment and examination of the developing young of the earth species.

Can there really be logic in the process of assessing three or four years of study of a subject within three hours on a sunny afternoon in midsummer ? Does it make sense to permit a future to be decided on the few days when the candidate is slightly ill, or psychologically depressed, or hysterically tense ? Can rationality be presumed in educationists who knowingly set essay-style tests to rank candidates in an individual order when those same educationists know from repetitive research that essay-style tests cannot be marked objectively ?

Of course, we could reply that the ancient Chinese civilisation utilised examinations to appoint civil servants, and that four thousand years of experience of examinations is not to be discarded without careful consideration. We might defend ourselves a little by adding that, during the past ten of those four thousand years, Western Europe has been progressively re-examining its examination structures. Yet, we would still find great difficulty in evading the charge that we examine for failure. We might find equal difficulty in avoiding the ironic assertion that the examination system has merely replaced the élites of birth and wealth, by the élites of intelligence expressed through academic achievement.

Of all socio-economic systems, the examination structures have received least attention. Yet, of all socio-economic systems, it could be argued that examinations are the most influential in structuring the individual's employment potential, his socio-economic status and thus his leisure-time pursuits, his aesthetic interests, and his acceptance, acquiescence in or rejection of the society in which he lives.

These somewhat astringent observations should serve to sharpen the critical faculties when considering the methods of assessing the candidates of economics examination in Western Europe.

Purpose of the examinations

It is remarkable that examiners rarely consider the reasons for examining. Tradition or past practice is no answer. Why then do we examine ?

One major purpose of examining is certainly to motivate the candidates. Competition is stressed ; success is praised ; failures are subject to social rejection. However much we may criticise the effect on the "failures", there is no doubt that properly designed, skilfully timed examinations do encourage most pupils to work a little harder than those who have no examination incentive.

If motivation were the sole purpose of examinations, there might be little to criticise, but examinations also select those who go on to more advanced study. Some examinations are used for prediction, for example in a particular career or in a particular form of higher education. Professional teachers may use examinations to provide information about gaps in knowledge or weaknesses of teaching or to discover how much was learned in a given amount of time. It is possible to use examinations to teach, to motivate pupils to teach themselves. Yet, all these varied aims seem to end in placing the candidates in an order from the "best" to the "worst", i.e. a rank-order. At every stage in this game of numbers there is opinion rather than knowledge, guess rather than certainty, and spurious rather than real accuracy.

Let us glance at the marking scheme utilised by a highly reputable examining body. The staff of this examing body are dedicated people of integrity and goodwill. They are advised by teachers (including the author) equally desirous of expending effort and exerting intellect to help young people onward through education.

TABLE 21 - Upper secondary level - Economics mark awarding scheme

Mark-range (Max 100)	Grade	Approximate percentage of passes	Result of examination
70 +	A	15)	Pass
60 - 69	B	20) 100 % of	Pass
55 - 59	C	15) these	Pass
50 - 54	D	20) passing	Pass
40 - 49	E	30)	Pass
30 - 39	O		Failure: but awarded pass at lower-level examination
0 - 29	F		Fail

This marking scheme prescribes a pre-determined mark-range for the award of grades ; a pre-determined percentage of passes for each grade, and a pre-determined cut-off point below which failure occurs.

Of course, examining bodies must have some administrative and numerical framework within which to organise examinations and produce results. The difficulty lies in the growing necessity to justify to parents, employers and pupils an examination system which pre-determines percentages of pass at each grade, which offers the spurious accuracy of a hundred-point mark scale (on essay-type examination questions) and which assumes that a regular 30 % to 40 % of candidates must fail at every examination.

These difficulties can be applied over almost the whole range of examinations, in almost every country of the world. We give below (table 22) the pass rates at the upper secondary school level for economics for selected Western European countries.

TABLE 22 - Pass rate of candidates in economics at the upper secondary level

Country	Pass rate (approximated)
Switzerland	"very high"
Fed.Rep. of Germany	over 90 %
Norway	90 %
Cyprus	85 %
France	74 %
Luxembourg	70 %
United Kingdom	62 %

These pass rates are taken from typical annual results. The percentages would vary a little year by year, but the general result could be expected to show the same relationships. There must, of course, be good educational or sociological reasons for the wide variations in pass rate shown for the different countries. For example, in the Federal Republic of Germany there are successive pre-examinations in the year before sitting the Abitur. These pre-examinations eliminate many potential failures - or compel candidates to take an extra year of study. This may result in deferring taking the examination so that the average age of Abitur candidates may be over 20. None the less, it might be very difficult to justify the variations in pass rate to an international committee of pupils from all the countries mentioned in table 22.

Examination methodology

The variation between countries of methods of examining also appears quite striking when we know that the countries concerned are at similar levels of social and economic development. Why is it that Sweden assesses economics students entirely by continuous assessment, while the United Kingdom utilises solely the terminal written examination method ? Why is it that Belgium calls upon two sets of examinations in the final year - one in December and another in June ? Why is it that, in Belgium, one third of the final marks are allocated to the December examination, while two-thirds are allocated to the June examination ? We set out below, table 23 showing a tabulation of some other differences of written method employed by some of the countries of Western Europe.

TABLE 23 - Written examinations set for economics at the upper secondary level

Country	Number of written papers	Duration of written papers (hours)	Number of questions which must be answered	Number of compulsory questions
Belgium	2	3 1/2	8 - 12	None
Cyprus	1	2	4 - 6	None
Denmark	2	4 - 5	3 - 4	None
France	1	4	1	None
Fed. Rep. of Germany	1	4 - 5	5	None
Italy	1	6	1 (only 1 questions set)	One
Luxembourg	1	3	Not fixed	None
Netherlands	2	2 1/2	Not fixed	Varies
Norway	1	4	Not fixed	None
Switzerland	3	3 - 4	Not fixed	None
United Kingdom	2 or 3	2 1/2 - 3	5 - 6	None

It is fascinating to speculate on the reasons which cause the number of written papers to vary from one to three. It is even more fascinating to ask why the number of questions to be answered is one (compulsory) in Italy, yet may be twelve in Belgium ? However absorbing to the research worker, there is no simple answer to these questions. On investigation we should certainly discover that much of the variation derived from the academic and educational traditions of each separate country. Nevertheless, we must recall that the pupils taking these examinations in all the countries concerned, are at much the same age, at much the same educational level, and that nearly all are aiming at entrance to university courses which themselves must be presumed to be at comparable levels of educational ability.

Some of the countries use oral examinations either to supplement, or in some cases to replace, the written examination. In France, the oral examination is used as a second stage in assessing candidates for the Baccalaureat. At the first stage (entirely a written test) some 20 per cent of the candidates are passed outright. Thereafter, the remainder of the candidates are given an oral test, and as a result, a further 50 per cent or so of the candidates are awarded a pass. In the Federal Republic of Germany oral tests are used for the Abitur examination as a means of determining pass or fail for borderline candidates whose course assessment grades do not match with the written examination grade. We give below in table 24 information about oral examining in selected countries.

TABLE 24 - Oral examinations set for economics at upper secondary level

Country	Duration of Oral Examination (minutes)	Number of Examiners present	Purpose of Oral tests		
			1 Deficiency in Written Papers	2 Parts of Syllabus not covered in Written Papers	3 Project Work done in Class
Austria	15	5 - 10	Tests all papers	Tests all syllabus	-
Belgium	40	3	-	-	-
Cyprus	15	2 +	For failures only	For failures only	-
Denmark	20	2	-	-	Yes
France	15	1	Yes*	-	-
Fed. Rep. of Germany	10 - 15	5 - 10	Yes	Yes	-
Italy	20	5	No	Yes	-
Switzerland	12 - 15	2 +	-	Yes	-

* For those candidates who obtain 8 - 12 marks out of 20 at the written examination.

Apart from the formidable example of Belgium which has a forty-minute oral examination, the remaining countries settle fairly generally for an oral examination lasting about 15 minutes. The number of examiners, however, varies enormously from the lonely eminence of one in France, to the costly and time-consuming group of ten to fifteen in Austria and the Federal Republic of Germany.

However much the different countries may vary in their application of examination methodology, the number of ways of examining can be reduced to a small number of general categories. These are :

1. Written test in examination conditions
   a) Essay type (long or short)
   b) Short answers
   c) Objective tests (please see later section on objective tests)
   d) Long written essays undertaken in class time or at home.
2. Oral tests
3. Course assessment by the teachers.

All these types of test have something to commend them. All types appear in one country or another of Western Europe. The general tendency appears to be leading towards a multi-sided assessment structure which includes the following major aspects :

1. Essay style tests

2. Objective style tests

3. Course assessment by the teachers

4. An oral assessment.

It is of interest to compare with this structure the French concept of an "examen-bilan" i.e. a balance sheet of a pupil's capabilities and achievements. The examen-bilan would take into account

1. Marks in any written examination

2. Course assessment by the teacher

3. Marks in any oral test.

Objective type testing is now being seriously studied in France, and may well form a fourth aspect, in the future, of the examen-bilan.

To English educationists the careful structuring of the written examination papers in Sweden would look very unfamiliar. The economics paper in the business studies course contains a substantial element of numerical calculation. The entire paper is couched in terms of business decisions. It is essential for the candidate to be able to work out comparative costings, turnover-rates, a rate of return on capital, and costs of production per unit. In addition to this general written paper, there are, in Sweden, examination tests, objective in style, in which candidates must in one paper state whether a given answer is true or false, and in another paper, choose the right answer of five choices.

In the United Kingdom experiments are now going on with a Business Studies syllabus at the Advanced Level at the General Certificate of Education. This syllabus incoporates sections on accountancy, marketing, trade union organisation, and management. There is an alternative paper in Business Mathematics or Statistics.

These developments are sufficient to show that there is much lively experiment going on in the countries of Western Europe. The methodology of examinations is under close critical scrutiny, and this is likely to produce changes in all the examination systems during the decade from 1971.

Examination marking

Some of the changes coming about in examination systems result from the enormous expansion in the number of secondary school examinees over the past decade. It is always difficult to find efficient and reliable examiners. The shortage is now becoming acute, and is accentuating the pressure towards more objective types of test which can be marked automatically.

Even good examiners are liable to considerable ranges of subjectivity in their marking. Hartog and Rhodes ("An Examination of Examinations") undertook an extensive research project, with some international examples in 1936. This research, (among many other aspects) took fifteen scripts independently. Instead of giving the same mark, the examiners awarded over forty different marks. The same examiners were asked to re-mark the same scripts a year later. Their re-marking altered the original assessment of "pass", "fail" or "credit" for 92 out of 210 candidates.

Another check was made by Hartog and Rhodes on a School Certificate English examina-

tion paper consisting of an essay and a précis. Seven examiners marked a particular candidate's paper. The marks awarded were 28, 32, 46, 56, 56, 58 and 60 out of 100.

The writer has had the experience of reading a given answer from an economics paper to twenty experienced examiners who awarded marks varying from 9 (bare pass) to 13 (near distinction) out of a possible 20.

With this kind of evidence in mind it is impossible to place much reliance on the marking of essay-type written examinations. The essay-type examination is, nevertheless an essential element in a multi-sided examination structure which might accord a weighting of (say) 25 per cent to the written essay component of the final examination mark.

Objective testing

Objective testing means that the questions are designed so that the candidates select one of a numbered series of answers. One only of the answers is correct. Therefore, if the candidate selects the correct answer he is right. All other answers are wrong. Let us look at a simple example of a true/false test such as that used in Sweden to assess economics candidates. Three questions are asked. The candidate is required to decide whether each statement is true or false.

1. Direct wages are included in the calculations of prime costs.
2. Tax of company profit is included in the calculations of prime costs.
3. Depreciation of machinery is included in the calculation of prime costs.

It will be obvious that each statement is either true or false. If the candidate knows his subject well he will correctly state whether each statement is true or false. If the candidate is right in all respects he will gain full marks. This marking system is entirely objective for there can be no element of choice in the mind of the person marking the answers. Such marking could be undertaken by a clerk, or by a computer with optical character recognition.

Let us take another example of an objective test. This type is named a "multiple choice" question, because the candidate has a choice of several answers from which he must choose the correct one. The candidate must place a ring round the designatory letter (a, b, c, d, or e) of the answer he regards as correct.

"When the market is controlled by only a few large buyers this is a situation of

a) oligopoly
b) monopoly
c) duopoly
d) perfect competition
e) monopsony "

The correct answer is "e", so the candidate who knows the right answer will place a ring round the letter (e). Again, the answer can be marked objectively. It can also be marked quickly. It may be added that such answers can be marked cheaply.

The examples given were chosen for simplicity, but much more sophisticated questions can be designed, and are being designed in several countries. In the United States of America a very large non-profit organisation, the Educational Testing Service offers a wide range of examination services including the writing and preparation - and pre-testing - of objective test items for any

subject and for every educational level up to university degree study.

Objective test experts approach their work scientifically. Their first task is to discover, by discussion with teachers, which educational skills are to be tested. Thereafter it is necessary to divide the relevant syllabus into appropriate divisions. It then becomes possible to prepare a test scheme specification so that questions can be deliberately designed both to cover all the intended educational skills, and to cover the entire syllabus.

As an example, we set out below a test scheme specification (table 25) designed in 1967 for economics candidates at the upper secondary level.

Table 25 shows that the examining committee have decided that they wish to test three major areas of educational skill in economics. These areas are

1. Recall : factual knowledge and understanding.
2. Application (of this knowledge).
3. Analysis (of economic material).

The table also shows that the examining committee has divided the syllabus of economics into seven major areas.

The examining committee has not, however, accorded equal weight either to the three educational skills, or to the various areas of the syllabus content. The weighting for the educational skills is in the ratio of 30 %, 40 %, 30 % ; whereas the seven areas of the syllabus content have been weighted in ratice of 5 %, 25 %, 30 %, 10 %, 15 %, 5 %, 10 %.

It will be obvious that this approach to an examination structure implies a great deal of careful thought. The same level of scientific thought can be applied to any subject and to any combination of educational skills.

As soon as an appropriate test scheme specification is agreed, examiners can be invited to write objective test items for given areas of the test scheme specification. These test items are scrutinised by a committtee of teachers of the relevant subject. All the items which are approved by the teachers must then be carefully fitted to the stucture of the test scheme specification.

However, a further dimension of scientific method may now be invoked. Before using the test questions (items) operationally, they can be pre-tested by setting them to a carefully selected sample group of pupils. A thorough statistical analysis is then made of the responses of the sample group. Not only is there an analysis of responses to the right answers (the right answer is known as the "key") but so also is there to responses to the wrong answers (known as the "distractors"). This means that each aspect of any objective test item can be tested for effectiveness i.e. reliability and validity before it is ever used operationally.

Similar statistical checks of reliability and validity are usually made after each operational use of an objective test question. In this way continual professional oversight is possible over the entire test structure.

It is not contended here that objective tests should become the sole method of assessing candidates. It is suggested, however, that objective testing might, with educational advantage, become one component in a multi-sided assessment system which would also incorporate written tests (including essays), oral tests, and continuous assessment of course work.

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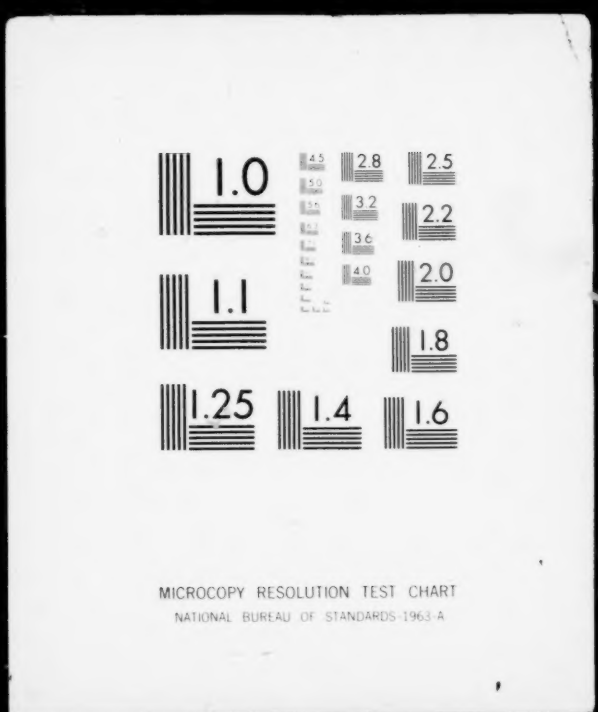

TABLE 25 - Test scheme specification for multiple choice paper : Economics - Upper secondary level

Educational skills to be measured	Preliminary ideas	Micro-Economics	Macro-Economics	International Economics	Economic Organisation	Population : Location of industry	Current topics, Misc	Total
1. Recall : factual knowledge and understanding	1	7	9	3	5	2	3	30 %
2. Application	2	10	12	4	6	2	4	40 %
3. Analysis	2	8	9	3	4	1	3	30 %
Total %	5	25	30	10	15	5	10	100 %

In Western Europe, objective tests are in use for assessing economics pupils at the upper secondary level in Sweden, for several examining bodies in the United Kingdom, and for some of the Länder in the Federal Republic of Germany. Delegates to the Council of Europe Working Party on Economics in April 1970 expressed considerable interest in extending the use of objective testing. The members of the Working Party recommended that the Council of Europe should consider the possibility of establishing a European item bank (i.e. list of objective test questions).

Comprehensive information about the philosophy and practice of objective testing is available in "Objective Testing in Education and Training" by the author.

Assessing reliability

Reliability in the examination world means the degree of consistency between one examination and another administered to the same candidates or to candidates at the same level of educational achievement. The degree of consistency can be affected by many factors, including the setting of the examination papers, the personal output of the candidates (which may vary) and the consistency of marking. Consistency of marking may vary both between one examination and another, and between one examiner and another.

Nevertheless, it is important for the community at large to be satisfied that the results of one examination mean the same as another purporting to be of the same level and in the same subject.

There are several procedures which may be used to establish the level of reliability.

First ; we could repeat the examination in the same form to the same candidates. A co-efficient of correlation can than be established between the two results.

Second ; we can set two (or more) separate but very similar examination papers and then compare results.

Third, we could divide the examination scripts into two comparable halves, (e. g. by taking out every alternate script to form one group) and compare results of these two groups of answers.

Fourth, it is possible to utilise a highly sophisticated statistical method of assessing reliability entitled the "Kuder-Richardson Reliability Co-efficient". This formula was very carefully worked out by two U. S. citizens named Kuder and Richardson and first published in 1937. This formula and method of working is particularly appropriate to objective test items.

Assessing validity

The validity of an examination is a measure of its success (or failure) in fulfilling its objectives, e. g. did a given economics examination paper appropriately measure the attainment to be expected of a pupil aged eighteen after seven years of secondary education ?

It is not feasible to find a good statistical check of validity. It is, however possible to form an estimate by inviting a panel of experienced teachers to assess the examination paper in the light of declared objectives.

It is much easier to assess validity for an objective style test than it is for essay style tests. For objective style tests it is, for example, possible to ensure that all aspects of the test scheme specification (educational skills and syllabus coverage) are included in the total of the test items.

Validity may also be assessed by obtaining a coefficient of correlation between test results, and predictive assessments made by teachers.

Assessing comparability

One of the major problem areas of examination systems throughout Western Europe is that of establishing comparability of examination results.

Comparability may need to be assessed between individual schools, if individual schools are enabled to determine the pass standards of their own candidates. This situation applies to most of the Länder in the Federal Republic of Germany. Yet, even beyond the school level, there appears to be no method in the Federal Republic of Germany of establishing comparability of results of examinations between the educational authorities of different Länder.

In the United Kingdom the same difficulty occurs in a different way because there are eight different examining boards which may examine candidates for the General Certificate of Education. Comparability needs to be established between the results and the gradings of these different boards.

An effort to meet the problem of establishing comparability has been made in Sweden. National standards of pass have been established against which the school results in the Studentexamen must be measured. This establishment of a national norm can also be checked by the employment of moderators who may travel from region to region, or school to school in order to provide some external assessment of relative standards between schools or regions.

We are now moving into a stage of history when it is becoming necessary to establish comparability of examination results at the upper secondary level between the countries of Western Europe (sometime in the future - between the countries of the world). This process becomes more and more necessary as the developments of international or European institutions cause a mobility of parents which enforces upon children a necessity to enter university in a country other than that in which they undertook secondary education.

Here again, the objective test method of examining makes a more effective method of assessing comparability of examination results. This is true if the comparison is of school with school, region with region, or even country by country. The establishment of a pre-tested, scientifically designed item-bank for the subject of economics throughout Western Europe would materially aid the comparability of economics examination standards in all the countries concerned.

The pass/fail concept

The question of pass or failure in a given examination is very much a matter of past traditions and subjective judgment. There is some sense in a failure mark if we are aiming to determine a specific number of examinees to be admitted to the civil service, or to award a pre-determined number of places at a university. At present, however, in most of the countries of Western Europe, the examinations used to decide upon university entrance are also used as a secondary terminal certificate. It seems improbable that we can continue to decide upon "failures" in a secondary school course of study. The appropriate aim must surely become that of awarding a certificate at the end of a course of study which states the level of achievement in every subject studied by the pupil. Employers, parents and pupils are likely to combine in requiring such a statement of achievement in the future, as the range of ability widens at the upper secondary school level.

Pressure is now growing for society to open more doors of re-entry into education for those people who have left early for one reason or another. Late entrants to education are more mature, and usually highly motivated. It is no longer relevant to refer only to a "failure" at a secondary terminal examination when such candidates are to be considered for late entry to further or higher education.

In some countries there is already an alternative route of entry to higher education i.e. a method of entry other than the traditional school course culminating in an academic type examination. In the Federal Republic of Germany it is possible to go to the Economics gymnasium. Success there will admit candidates to the economics faculty of many universities. In the United Kingdom it is possible to leave school at 15 or 16 and yet pursue further studies part-time in order to gain an Ordinary National Certificate, or full-time at a College of Further Education to obtain an Ordinary National Diploma. Both the Ordinary National Certificate and the Ordinary National Diploma may, with appropriate pass levels, admit their owners to higher education.

Such alternative routes are likely to be expanded in the future and to appear in more countries. These variations from the normal academic method of entry to higher education mean that "failure" at an academic course of study has become an inappropriate educational term.

Problems of congruence

Congruence of examinations means that the examinations fit the input, and the output requirements of those taking the examination.

How far does the Abitur, the Studentexamen, the Baccalauréat or the General Certificate of Education at Advanced Level fit the candidate for university education in a particular faculty ? How far do these same examinations fit the needs of young people entering employment ? How far does the educational equipment we offer fit the needs of employers ?

So far, relatively limited attention has been paid to these vital aspects of examination structures. We can expect all parties, employers, parents, pupils and teachers to influence examination structures far more in the future with a view to making those examination structures fit the needs of the candidates.

Pupil participation

The newest factor in the equation of forces which decide upon the shape of education is the pupil. Hitherto, pupils at secondary schools have largely been regarded as too immature and inexperienced to have anything of value to offer in structuring their own education. This has been true despite the fact that, at the end of the upper secondary stage, the pupils may be aged 18, 19 or 20.

We cannot expect this silent acquiescence to continue. Pupils in France, the United Kingdom and Sweden have already begun to flex their muscles in preparation for what they term the democratisation of education. Participation of senior pupils in the shaping of their own education seems a likely development for the upper level of secondary schools in the immediate future. This participation may have desirable effects, if it can enable the pupils to achieve regenerated motivation through understanding in place of acceptance. But understanding will not come easily for the current examination structures. The concept of "justice" stands high in the scale of values of the young, and justice is hard to defend in some of our current examination practices. We should be ready for innovation in examination practice as our best defence against the newly critical young.

C H A P T E R I X

A CHALLENGING FUTURE FOR ECONOMICS

The Organisation for Economic Co-operation and Development (OECD) published in 1966 a survey entitled "Curriculum Improvement and Educational Development". That survey gave some facts and forecasts about the expansion of enrolments in secondary education. For example, enrolment in secondary education in the European countries had doubled during the past 15 - 20 years, and and was expected to double again by 1980. For the OECD area as a whole, enrolments in full-time education for the 15 - 19 age group were as follows for the year 1960.

U. S. A.	69. 5 per cent of the age group 15 - 19						
France	49. 3	"	"	"	"	"	"
Netherlands	29. 9	"	"	"	"	"	"
Portugal	12. 7	"	"	"	"	"	"

The forecast was made that it would be realistic to expect for a not-too-distant future, an almost 100 per cent enrolment ratio in full-time education for the total age-group 6 - 18 in the OECD area.

This enormous expansion of full-time secondary education is more than matched by the expansion of higher education.

In 1971 OECD published a survey of the expansion of higher education since 1950. The survey shows that, over the period 1950 to 1967 and for the 22 member countries, higher education expanded at an annual growth rate of seven per cent in numbers and 13 per cent in cost. The main cause of the rise in higher education was the preceding expansion in secondary education.

Now let us glance at a forecast. For England and Wales, Her Majesty's Stationery Office published, in June 1970, "Education Planning Paper No. 2". That planning paper assessed the number of full-time students in higher education as follows.

TABLE 26 - Number of full-time students in higher education

Year	Number of New entrants	Number of Students actually studying
1961	55, 900	162, 900
1971	135, 600	436, 800
1981	218, 000	727, 100

How does the study of economics stand in this expansion of seconda. and higher education ? The answer is that the social sciences as a broad subject of study are expanding faster than any other area, and that economics is a major factor in the group of subjects described as the social sciences. We have some hard statistical evidence from the United Kingdom. In that country, over the period 1955 to 1968, the rate of growth in entries from candidates taking economics at the Advanced Level of the General Certificate of Education was the highest of all subjects. While the total number of all subject entries doubled, the entries for economics increased eleven times.

Expansion of economics study on this scale has not yet occurred in all the countries of Western

Europe. It is clear, however, that the educational authorities in France are extending the teaching of economics to all sections of the Lycée, and that there is a tendency to introduce economics as a general subject at the beginning of secondary education. Sweden is experiencing an extension of economics teaching through business studies. The Federal Republic of Germany has its separate economics gymnasium. Luxembourg regards economics as a subject of general culture, and Ireland introduced economics for the first time at upper secondary level in 1970.

We have no need to expand these examples in order to conclude that economics has a challenging future in Western Europe.

Study of economics as a factor of economic growth

Economists in several countries have been ready during the past two decades to defend the expansion of educational opportunity on the grounds that education is a form of capital investment in people and that it will add to economic growth.

This thesis has its basis in an advancing technology which requires more and more highly trained people to master and manage the processes.

It is too often forgotten, however, that the more advanced an economy becomes, the more does it require highly trained administrators and managers. Both public administration, and private (or public) industry require personnel who are well trained as economists.

We have already suggested, in our first chapter that industrial peace may depend on the education in economics of trade union members. It is not too far a step from these considerations to go on to argue that a widely disseminated knowledge of economics may well be a factor in economic growth. Economics, after all, can be defined as the allocation of scarce means to alternative ends. The more efficiently this process is carried out, from the household to the nuclear energy plant, the higher will become our standard of living.

Economics at the lower secondary level

The main educational area under consideration in this study has been the upper secondary school level i.e. for children aged 15 - 16 up to 18 - 20. We must, however, take note that the study of economics is also expanding at the lower secondary level. Commerce courses, commerce schools, commerce classes in comprehensive schools, all add to the growing body of knowledge about economics for children aged 11 to 15. This expanding output of elementary economics at the lower secondary level will become input to the upper secondary level. This flow of enlarged economic knowledge should provide an infrastructure for the raising of standards at the upper secondary level.

Economics at the university level

Similarly, we can expect the much more rapid expansion of economics learning at the upper secondary level to permit wider specialisation and deeper study of economics at the university level. We can already see, in the academic study of economics at upper secondary level, that the earlier stages of economic study have moved down from the first year of university courses to the two terminal years of school study.

If this process continues, it should enable university courses in economics in future to attain higher standards. Specialisation may occur in the form of econometrics, computer-based economic model structures, research into the national and international management of money, and business

applications such as market research, personnel management, advertising, and the economic implications of environmental studies.

It is at this level that we must expect economics to become a compulsory subject for our future senior national and international civil servants, for our administrators of public corporations, and for the businessmen who will manage large economic enterprises.

Economics and business studies

Sweden has shown great enterprise in the incorporation of an economics line into the upper secondary educational system. As we have seen, this line of education incorporates accountancy, marketing, economics and business administration. A Business Studies course, incorporating similar disciplines is experimentally operating in a few schools in the United Kingdom. The United Kingdom has further expanded the teaching of business studies by the development of full-time courses outside the school. These are the Ordinary National Diploma in Business Studies, (two years approximate ages 16 - 18), and the Higher National Diploma in Business Studies, (two years, approximate ages 18 - 20). The Ordinary National Diploma entries expanded from 596 in 1963 to 2,600 in 1969. The Higher National Diploma entries expanded from 38 in 1963 to 1,906 in 1969.

We should expect further developments of this kind in several countries of Western Europe. The typical combination of subjects in business studies courses, accountancy, law, economics, a modern foreign language provide a good general education which is nevertheless vocationally orientated and carries powerful motivation for the students.

In some countries of Europe, Sweden, Switzerland, Austria and some Länder of the Federal Republic of Germany there is still a clear distinction drawn between the schools preparing for commercial education, and those preparing for academic education. In the broadest possible terms, there is a concentration on micro-economics in the specialist commercial schools, while the academic schools may concentrate on macro-economics, sometimes teaching micro-economics as the introductory material for macro-economic concepts. This organisational problem may not be too serious. Some seepage is likely to occur of macro-economics down the line to lower secondary commercial education. This process has been occurring for some time from the university level to the academic secondary level of education. There seems to be a reasonable presumption that this process will continue.

Business Studies is thus likely to expand as a general area of education, and economics must inevitably form a vitally important part of business education.

Need to study wholly planned economies

If there is one major weakness in the teaching of economics in Western Europe, it is a relative failure to study wholly planned economies. It may be argued that there is enough to learn about capitalistic and mixed economies, but this argument omits to consider the profoundly educational value of comparison and contrast. Comparison and contrast are not easily employed by teachers of economics in Western Europe for the simple reason that the most obvious comparisons are with similar countries with mixed socialist/capitalist economies; It will not be easy to persuade teachers - or educationists in general - that a study of a wholly planned economy should become a standard part of the syllabus in economics of every country of Western Europe.

It is not necessary to look solely to the U.S.S.R. for a case study of a wholly planned economy. Examples stand beside Western Europe in Eastern Europe. These different economies already

exchange substantial quantities of goods and services each year. This exchange process alone should justify a necessity for a mixed type of economic organisation to be taught by contrast or comparison with a wholly planned economy.

Is there a Western European economy ?

The study of external economies invites a question as to whether all students of economics in Western Europe should study Western Europe as an economic entity. Of course, in a politico-economic sense there is no economic entity of Western Europe. However, if we disregard political boundaries, and concentrate on economic activity, it might well be possible to envisage a micro-economic study of Western Europe.

Some of the largest industrial and commercial enterprises already treat Western Europe as one market. Car production firms, chemical producers, oil consortia, plastics producers and air-lines all tend to act economically as if Western Europe were an economic entity. Customs barriers at political boundaries are a nuisance, but even they are breaking down.

The European Economic Community formed its customs union in 1968. The E.E.C. is in the process of forming common industrial, energy, and regional policies. A single Western European currency with a common currency reserve is a stated aim of E.E.C. countries.

Perhaps the least known, yet potentially the most exciting and formative of European institutions is the Euratom Computer-Aided Nuclear Documentation System. This institution, centred in Luxembourg is part of the Common Market Statistics and Publicity Division. The centre is the prototype of world information services on a scale not yet provided anywhere. So far, the Nuclear Documentation System services mainly E.E.C. members, and concentrates on information about nuclear physics. The centre provides an almost immediate service of information drawn from 10,000 scientific journals, nuclear patents, conference papers, and published reports. Although nuclear physics orientated, the centre covers major areas of biology and medicine, chemistry, engineering and instrumentation, geology, mineralogy and meteorology, health and safety, isotope technology, mathematics and computers, metallurgy and ceramics, physics and reactor technology.

If we see this type of information centre re-orientated towards economic and industrial information we should have acquired a new factor of production of value to every economic institution in Europe.

It would be premature to assume the formation of a political entity of Western Europe. It does not, however require more than a limited adjustment of thinking to anticipate in Western Europe an economics syllabus addition entitled "the Economy of Western Europe".

A study of developing economics

The inhumanity of man to man has become slightly ameliorated by the technologies of communication and travel. This softening of xenophobia is already expressed through the education systems of many countries. There is a renewed sense of a European man - even perhaps a dim realisation that, one day, there may be citizens of the world.

This re-vitalised concept of compassion and concern for the less privileged finds some expression through governmental aid programmes, but very little so far through the teaching of economics. A few countries, France, the Netherlands, Italy, Malta, Sweden stress the need to teach economists about the economics of "developing" territories, but insufficient stress is laid on the educational value

of comparing advanced with developing economies. It is important too, that this medium is used to enable young people to understand the different countries with the aim of encouraging some practical aid. There is already a sense in [illegible] the world is one economy. We would do well to utilise the teaching of economics to enable th[illegible] with high standards of living to discover that low standards of living exist, and that the two types of economy are inter-dependent.

An International Baccalaureate

These somewhat idealistic sentiments may lead us to consider whether any practical effort is being made to develop education, economic or other, in an international context.

There is indeed some movement in this direction. There are international schools in most of the largest cities of the world. Some of these schools utilise the teaching syllabuses of the International Baccalaureate for their upper secondary school education.

The International Baccalaureate grew out of an established need to provide an education for the children of internationally mobile people. The children required an education terminating in an examination which would be acceptable to the universities of many different countries.

The first full International Baccalaureate examinations were held in May 1970. Fifteen multinational schools were in taking the courses leading to the examination. Each syllabus contains some reference to international education. Each course must include a "study of man" which goes beyond national boundaries. We have already given the higher Economics syllabus in chapter III.

The International Baccalaureate has now received recognition from 21 countries as a qualifying examination for admission to university studies. This recognition may lead to a re-consideration of all national terminal secondary examination structures with a view to making them more internationally acceptable. International acceptability is bound to require an element of international education.

The International Baccalaureate may be no more than a prototype of future terminal secondary examinations. It does, however, provide a model, against which to test or compare educational philosophy and practice in a national context.

A European University

International, or European examination structures must inevitably lead to international or European Universities. In 1961 a meeting was held in the Hague of heads of state of the European Common Market countries. The meeting decided to set up a European conference of Education Ministers, and to begin the institution of a University of Europe to be sited in Florence.

These developments may take some time to reach fruition, though there are already some universities in Europe with a multinational student body. The University of Trier, set up in 1970 is already drawing many students from the Federal Republic of Germany, Holland, Belgium, Luxembourg and France.

Any development of a European university must make an economics faculty one of its major academic disciplines. Research and development into the teaching of economics should also be a function of such a European orientated source, then we might expect to experience a renaissance of European learning based on economics and education in Western Europe.

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